

**AR92**

**Manitoba Hydro-Electric Board  
57th Annual Report**

For the Year Ended March 31, 2008



Manitoba Hydro Place





## Letter of Transmittal

July 31, 2008

Honourable Greg Selinger  
Minister Charged with the Administration of The Manitoba Hydro Act  
Legislative Building  
Winnipeg, Manitoba  
R3C 0V8

Dear Minister:

I have the honour of presenting the 57th Annual Report of The Manitoba Hydro-Electric Board, together with the financial statements, for the fiscal year ended March 31, 2008.

Respectfully submitted,

Victor H. Schroeder, QC  
Chairman, The Manitoba Hydro-Electric Board

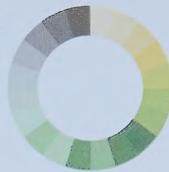
Manitoba Hydro Place, 380 Portage Avenue.

The gleaming glass and steel structure on our cover is Manitoba Hydro's new corporate office tower and headquarters, in downtown Winnipeg. The 22-storey building is designed to be one of the most energy-efficient large scale office buildings in the world.

The number of the new building's main address—380 Portage Avenue—is telling: 380 represents the year Manitoba Hydro implements the use of 100% renewing water power that provides reliable and sustainable energy, our commitment to sustainable development, our respect for the natural world, our products and services, our connection with our communities, customers, and investors.



*Our cover*



**Manitoba Hydro Place, 360 Portage Avenue.**

The gleaming glass and steel structure on our cover is Manitoba Hydro's new corporate office tower, and headquarters, in downtown Winnipeg. The 22-storey building is designed to be one of the most energy-efficient large scale office buildings in the world.

The number of the new building's street address—360 Portage Avenue—is also a fitting metaphor for what Manitoba Hydro represents: the cycle of self-renewing water power that provides reliable and continuous energy; our commitment to sustainable development and respect for the natural world; our proactive and positive relationships with our communities, customers, and employees.



A welder works on the steel structures of the new downtown office's south winter gardens.





## Letter of transmittal

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Manitoba Hydro is a provincial Crown Corporation, providing electricity to 521 599 customers throughout the province and natural gas service to 261 159 customers in various communities. The corporation also imports and exports electricity within wholesale markets in Canada and the mid-western United States.

Manitoba Hydro offers its customers a wide range of energy services. In addition to providing electricity and natural gas, the corporation aggressively promotes energy conservation through its many Power Smart\* programs. Manitoba Hydro is also known nationally for its quality of service and reliability and is the only Canadian utility that participates as a member of an international transmission organization—the Midwest Independent System Operator.

Nearly all of Manitoba Hydro's electricity is generated from self-renewing waterpower. On average, about 30 billion kilowatt-hours of electricity are generated annually, with 98 per cent of the total produced from 14 hydroelectric generating stations, primarily on the Winnipeg, Saskatchewan, and Nelson rivers. The remainder of the province's energy needs is produced from two thermal generating stations, four remote diesel generating stations, and power purchased from the independent wind farm at St. Leon.

Manitoba Hydro delivers natural gas—purchased from producers in Alberta and transported to the province through the TransCanada Pipeline network—to nearly 100 communities in the province.

The corporation's capital assets in service at original cost exceed \$11 billion, making Manitoba Hydro one of the largest energy utilities in Canada. The governance of the utility is through The Manitoba Hydro-Electric Board, whose members are appointed by the Lieutenant-Governor in Council.

A respected corporate citizen, Manitoba Hydro is also well-known for its environmental practices, its renowned employee volunteerism, and its outstanding community support.

\*Manitoba Hydro is a licensee of the Trademark and Official Mark.

**Taskinigup Falls on the Burntwood River, future site of the Wuskwatim Generating Station.**



## **Our vision**

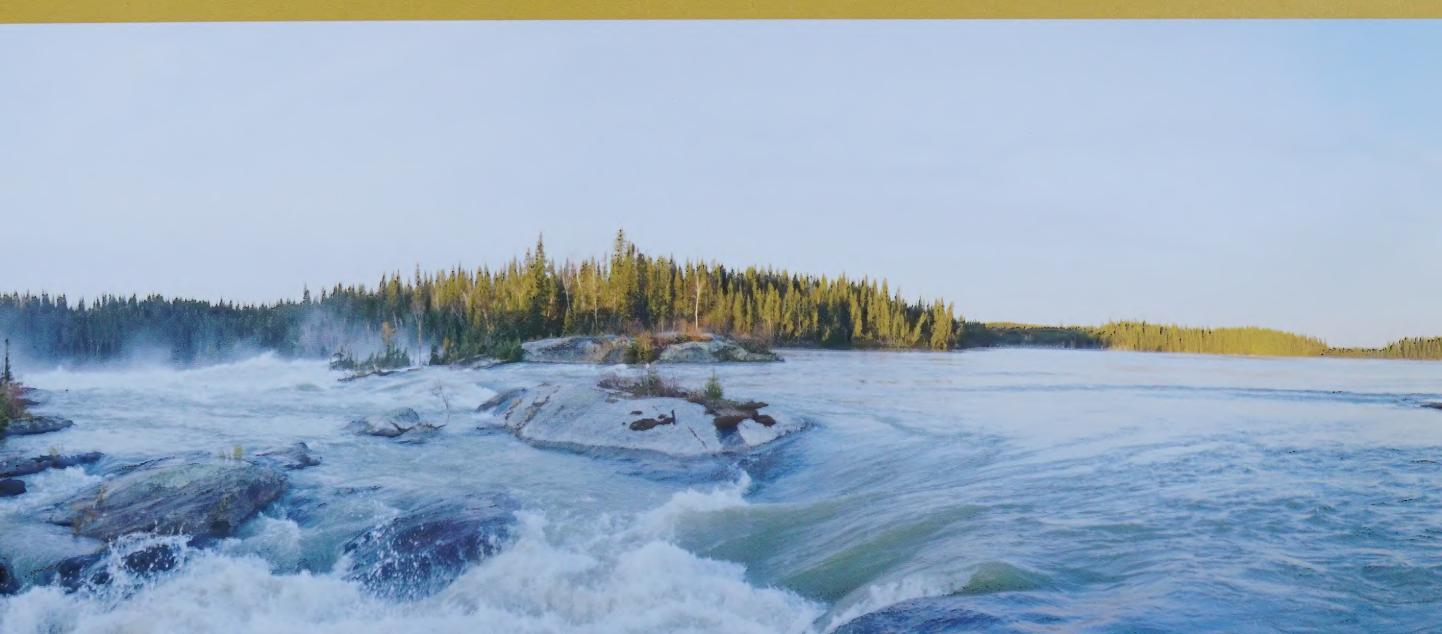
To be the best utility in North America with respect to safety, rates, reliability, customer satisfaction, and environmental leadership, and to always be considerate of the needs of customers, employees, and stakeholders.

## **Our mission**

To provide for the continuance of a supply of energy to meet the needs of the province and to promote economy and efficiency in the development, generation, transmission, distribution, supply, and end-use of energy.

## **Our goals**

- Improve safety in the work environment.
- Provide customers with exceptional value.
- Be a leader in strengthening working relationships with Aboriginal peoples.
- Improve corporate financial strength.
- Maximize export power net revenues.
- Attract, develop, and retain a highly motivated workforce that reflects the demographics of Manitoba.
- Be proactive in protecting the environment and the leading utility in promoting sustainable energy supply and service.
- Be an outstanding corporate citizen.
- Proactively support agencies responsible for business development in Manitoba.
- Be a national leader in implementing cost-effective energy conservation and alternative energy programs.



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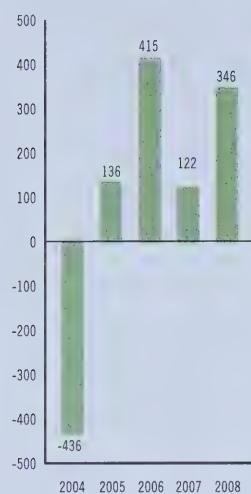
A transmission line near Poplar Point is silhouetted against the backdrop of the striking northern lights.



- Manitoba Hydro's new 22-storey corporate office was nearing completion by the end of the fiscal year. The building will be a signature landmark in downtown Winnipeg and a showcase for energy-efficient building technology.
- Construction at the Wuskwatim Generating Station on the Burntwood River included completion of the all-weather access road, excavation at the site, and development of the construction camps. Also energized this year was the 230-kV transmission line from Thompson to the site.
- Manitoba Hydro recorded a net income of \$346 million in the fiscal year, the second highest in the corporation's history.
- Manitobans installed over 920 geothermal heat pump systems in 2007, a 40 per cent increase over 2006. The province is the national per capita leader in the adoption of geothermal heat pump technology in residential heating systems.
- Discussions started with a developer of a proposed new wind energy project near St. Joseph, Manitoba after proposals from several potential developers were appraised.
- Manitoba Hydro signed power sales agreements—subject to confirmation—with Minnesota Power in December 2007 and Wisconsin Public Service at the end of the fiscal year.
- Manitoba Hydro was the largest exporter of electricity in Canada in the fiscal year.
- The corporation announced that it would build a new high voltage direct current transmission line on the west side of the province. The line will originate in northern Manitoba and terminate in southeast Winnipeg.
- Manitoba Hydro received an award from the Canadian Gas Association for the best safety performance for gas utilities in Canada.

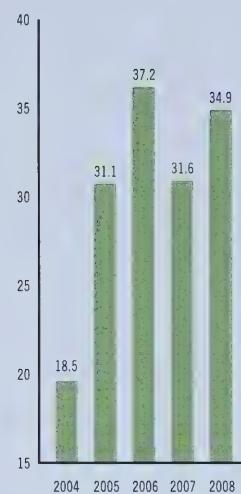
## NET INCOME

millions of dollars



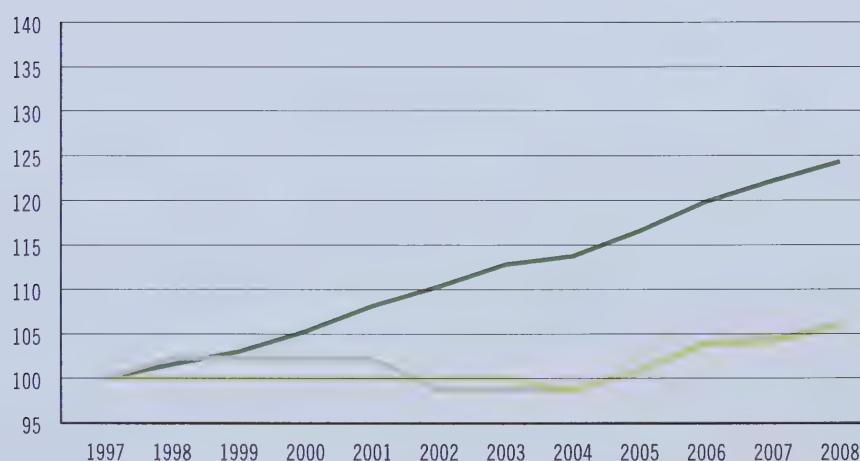
## TOTAL GENERATION

billions of kWh

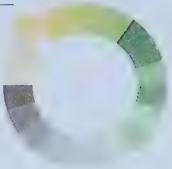


## ELECTRICITY RATE CHANGES VS. MANITOBA CONSUMER PRICE INDEX (1997 = 100)

CONSUMER PRICE INDEX  
RESIDENTIAL  
INDUSTRIAL



# Our highlights



## FINANCIAL RESULTS

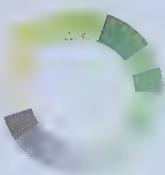
	ELECTRICITY		NATURAL GAS		TOTAL	
Revenue	2008	2007	2008	2007	2008	2007
Manitoba	1 097	1 040	528	508	1 625	1 548
Extraprovincial	625	592	-	-	625	592
	1 722	1 632	528	508	2 250	2 140
<b>Cost of gas sold</b>	-	-	386	379	386	379
<b>Expenses</b>	1 382	1 511	136	128	1 518	1 639
<b>Net income</b>	340	121	6	1	346	122
<b>Retained earnings</b>	1 795	1 386	27	21	1 822	1 407

## OPERATING STATISTICS

	2008	2007	Increase/(Decrease)
<b>Electrical Operations</b>			
Sales			
Manitoba sales	21.0	20.5	0.5
Extraprovincial sales	10.6	8.2	2.4
System supply			
Generation	35.4	32.1	3.3
Imports	0.6	1.8	(1.2)
Manitoba peak load	4 273	4 184	89

	2008	2007	Increase/(Decrease)
<b>Natural Gas Deliveries</b>			
Residential sales	647	620	27
Commercial and industrial sales	891	844	47
Transportation service	1 538	1 464	74
	618	592	26
	2 156	2 056	100





The Board of Manitoba Hydro was pleased to see favourable water conditions continue throughout the 2007-08 fiscal year and the corporation's resulting achievement in net revenues, including near record levels of export electricity sales. This performance further strengthened the corporation's financial position and its well-deserved status as an important component of the provincial economy. It is also a testament to the foresight and timely decisions of those charged with meeting Manitoba's energy needs.

In the past year, the Board noted the corporation's continued progress in a number of strategic areas that will ensure this province's energy resources continue to benefit future generations.

The impressive new downtown headquarters of Manitoba Hydro is nearing completion and will be a striking addition to Winnipeg's skyline when completed later this year. The world-class, energy-efficient building will serve as a tangible example of Manitoba Hydro's most important values and objectives.

Manitoba Hydro and the Nisichawayasihk Cree Nation (NCN) continued working as partners on the Wuskwatim Generating Station project. This unique business arrangement provides for NCN's involvement in all aspects of development—from construction to the project's ongoing environmental monitoring activities. It also gives NCN the opportunity to create a long-term source of revenue by investing in ownership of up to 33 per cent of the station. The Board was also pleased by the Canadian Electricity Association's decision to recognize this precedent-setting partnership with their Environmental Stewardship Award in February 2008.

Progress was also made this year in discussions to finalize a joint agreement with the Tataskweyak Cree Nation, War Lake First Nation, York Factory First Nation, and the Fox Lake Cree Nation that will set out their participation in developing the proposed Keeyask Generating Station. In addition, Manitoba Hydro reached an agreement with the Shamattawa First Nation with respect to their participation in planning activities related to the proposed Conawapa Generating Station. Process agreements have already been signed with the other First Nations in the vicinity of the project.

The Board supported the decisions made in the past year to ensure the continued reliability and affordability of the province's electricity supply. In particular, the decision to pursue construction of the Bipole III transmission line is critical to ensuring the timely completion of this vital link needed to enhance system reliability. The exact route of the line will be determined after an extensive environmental assessment and public consultation process.

The corporation also continued to support the province's alternative energy industry. Significant progress was made over the past year pursuing the addition of another 300 megawatts of wind to Manitoba Hydro's energy supply mix. A new program promoting the installation of geothermal systems in commercial buildings was introduced, complementing a successful residential program that has seen Manitoba become the geothermal industry leader in Canada.

The Board was pleased to see additions to the corporation's wide range of energy services and programs, including enhancements to the Power Smart Residential Loan Program and a new Lower Income Energy Efficiency Program that improves accessibility to various services. Power Smart programs continue to benefit Manitobans by providing energy savings and increased comfort while also enabling increased electricity exports that benefit the environment and the province's economy.

I would like to express my sincere appreciation for the contributions of my fellow Board members in the last year and thank Bob Brennan and all the employees at Manitoba Hydro for their continued work on behalf of all Manitobans.

**Victor H. Schroeder, QC**  
Chairman  
The Manitoba Hydro-Electric Board





This past fiscal year a number of significant events and major milestones took place at Manitoba Hydro, on many fronts.

Our utility made significant progress towards meeting its financial goals this year, improving both its debt to equity ratio and retained earnings. Net income for the year was \$346 million—the second highest in the corporation's history—up from the \$122 million earned last year. Good water flow conditions and increased hydroelectric generation allowed for increased electricity sales—with extraprovincial revenue reaching \$625 million, also the second highest recorded.

Manitoba Hydro was once again the largest electricity exporter in Canada, thanks to continued efforts to forge strong connections within the market—through participation in the Midwest Independent System Operator, for example, and the ever growing demand for clean, renewable sources of energy, such as water power. We remain committed to ensuring Manitobans continue to benefit from that demand.

In addition, Manitoba Hydro signed power purchase agreements with Minnesota Power and Wisconsin Public Service. The Minnesota Power agreement is for a 15-year sale of 250 megawatts (MW) starting in 2020 and a sale of surplus energy beginning in 2008. The Wisconsin Public Service agreement is for 500 MW over 15 years starting in 2018. These energy sales will require the Bipole III transmission line as well as new hydroelectric facilities in northern Manitoba and another major transmission interconnection between Canada and the United States.

Manitoba Hydro continues to promote the efficient use of energy through innovative programs and awareness campaigns. The corporation's Power Smart initiative has helped Manitobans collectively reduce their bills by \$275 million. Plus, the reduced demand for electricity frees up more energy for sale on the lucrative export market, helping to maintain low domestic electricity rates while also displacing greenhouse gas emissions from fossil-fueled generation in other parts of North America. It's estimated that the Power Smart initiative has prevented over 965 000 tonnes of carbon equivalent emissions since its inception in 1991.

Our utility is recognized internationally for its action in promoting reductions of greenhouse gas emissions. In the past year, we committed to participating in the second phase of the Chicago Climate Exchange, which Manitoba Hydro helped to found.

In addition, Manitoba Hydro continues to support research and development projects that explore alternative, carbon-neutral sources of energy, from solar greenhouses to biofuels such as switchgrass and cattails.

As with any business, Manitoba Hydro's most important relationship is with its customers. So, it was particularly gratifying when a survey last year by J.D. Power & Associates found Manitoba Hydro's customers to have the highest level of satisfaction among Canadian residential electric utility customers.

Construction on our new corporate office in downtown Winnipeg continued aggressively throughout the year, with final concrete being poured on the top floor in November 2007. When complete later this year, Manitoba Hydro Place will be a showcase for the latest energy-efficient technologies and design practices, serving as a real-life example for other commercial construction projects in Manitoba and throughout North America. Its passive building systems, fresh air, and abundant natural light will create a healthy and productive workplace for our staff. By bringing approximately 2 000 employees to downtown Winnipeg it will add even more momentum to the area's ongoing revitalization.

As we mention at the beginning of this year's annual report, the address number of our new downtown office—360 Portage Avenue—is also a perfect metaphor for what Manitoba Hydro represents. The Corporation is, after all, defined by its many diverse activities and relationships—all equally important to success in meeting our goals and all contributing to our core mission.

Manitoba Hydro's partnership with the Nisichawayasihk Cree Nation to construct the Wuskwatim Generating Station in northern Manitoba was recognized by the Canadian Electricity Association as a model for future resource development around the world. The partnership saw a number of milestones reached this year. The all-weather road into the site, the main construction camp, and the excavation for the station's structures were all completed. In addition, the transmission line used to supply power to the project was energized. Environmental, social, and economic monitoring incorporating the traditional knowledge of the Nisichawayasihk people was undertaken throughout this work to verify and manage forecast impacts of the project.

The corporation also moved ahead with a number of projects to enhance the reliability and efficiency of Manitoba's electricity system.

We've announced our intent to build a third high voltage direct current line, known as Bipole III, to strengthen our critical connections to northern generating stations. The first round of community and public consultations on the project began at the end of the fiscal year. Over the summer months, Manitoba Hydro representatives will meet with elected officials, community leaders, and other potential stakeholders to discuss the project and the environmental assessment planning process in detail.

Manitoba Hydro also initiated the regulatory approval process for a rebuild of Pointe du Bois—the province's oldest generating station. This modernization will not only enable us to maintain appropriate operational and safety standards, it will increase the station's generating capacity by approximately 65 per cent due to design improvements

Plant upgrades, such as new turbine runners, are also being made to the Kelsey Generating Station. Once completed, the Kelsey Re-runnering Project will increase that station's capacity by approximately 33 per cent.

One of our key strategies is to tap into the human resource potential of the province's growing Aboriginal community. Manitoba Hydro is already a leader in this regard with over 13 per cent of our overall workforce and 40 per cent of our northern workforce being Aboriginal. We continue to work with various stakeholders to create further opportunities.

The corporation is partnering with a number of First Nations and Aboriginal organizations in the Northern Training and Employment Initiative, a pre-project training program intended to provide northern Aboriginal people with the skills and training needed to work on the Wuskwatim and proposed Keeyask projects. We also meet regularly with the Aboriginal Council of Winnipeg, Assembly of Manitoba Chiefs, Manitoba Métis Federation, and the Northern Association of Community Councils as part of the Joint Employment Working Group to discuss strategies for enhancing employment opportunities for Aboriginal people.

We continue to plan for the proposed 695-MW Keeyask Generating Station, actively consulting and negotiating with the project's Cree Nation partners. Work on the 1 485-MW Conawapa Generating Station also continues to progress through the pre-project planning phase.

Manitoba Hydro is exploring opportunities to incorporate alternative sources of energy into the province's supply. A review of proposals to provide up to 300 MW of wind power was completed and discussions are underway with St. Joseph Wind Farms regarding proposed developments near Altona. Manitoba Hydro already has an agreement to purchase energy produced by the 99-MW St. Leon Wind Farm.

I believe all of our results are largely indicative of the commitment by our staff to their work and their communities. Whether it's restoring power after a storm or working in our communities as volunteers, Manitoba Hydro employees have a reputation for being there when needed. One example of this commitment was the extraordinary efforts of those employees who worked to restore power in the wake of the devastating tornadoes and thunderstorms that struck southern Manitoba in June 2007.

That mission is to provide energy to meet the needs of Manitobans while also meeting their expectations that the energy is reliable and delivered in a safe, cost-effective, and environmentally-responsible manner. This past year, Manitoba Hydro continued to take steps to build the relationships necessary to meet those expectations.

As Manitoba Hydro prepares to move into its new signature office building at 360 Portage Avenue in Winnipeg the corporation is also moving forward with a series of generation and transmission projects that will cement its position as a leading energy utility in North America. It's an exciting time for Manitoba Hydro and for Manitoba, made possible by the strong relationships we've forged throughout all aspects of our business.

I thank all employees for their continued dedication to meeting the energy needs and expectations of all our customers. I would also like to recognize the contribution of Victor Schroeder, the Chairman of the Hydro-Electric Board, and the other members of the Board and thank them for their guidance.



**R.B. Brennan, FCA**  
President and Chief Executive Officer

*Our year*



The picturesque Grand Falls Generating Station on the Winnipeg River.

**Manitoba Hydro's new 22-storey corporate office on historic Portage Avenue in downtown Winnipeg continued to take shape as construction progressed throughout the year. The 64 590 square-metre building will be a world-class model of energy efficiency and sustainability and will be a practical demonstration of the corporation's commitment to these principles—truly a signature building in the making.**



Aerial view of the new downtown office revealing its dramatic design and shape.

PORTEAGE PLACE

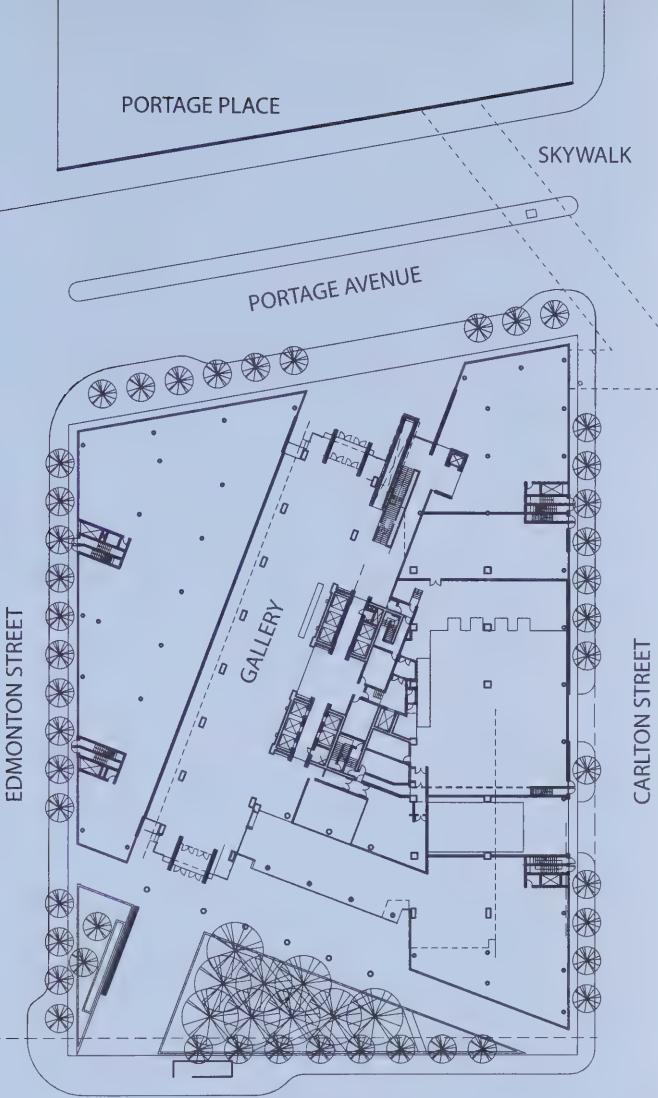
SKYWALK

PORTEAGE AVENUE

EDMONTON STREET

GRAHAM AVENUE

CARLTON STREET



*Our signature  
360 Portage*



## Contributing to a vibrant downtown

Manitoba Hydro's corporate office occupies an entire block on the south side of Portage Avenue in the heart of downtown Winnipeg.

The design is integrated into the local architectural milieu with a two and three-storey podium at street level scale—which includes leased retail space. A landscaped public courtyard on the southern exposure and a connection to the downtown elevated walkway system on the northeast side blends into the downtown environment.

Locating Winnipeg's largest office tower and approximately 2 000 Manitoba Hydro employees in one central location will deliver a new energy to downtown, contributing to a healthy and vibrant city centre.

## Project milestone

In November 2007, a significant project milestone was celebrated at a topping-off ceremony on the 22nd storey to mark completion of concrete placement on the building's top floor. By fiscal year end, installation of the double-glass curtain wall was nearing completion and work began on enclosing the south winter gardens.

With a target of LEED™ (Leadership in Energy and Environmental Design) Gold certification, the building will consume 60 per cent less energy than a modern conventional office tower and will provide a healthy and productive work environment for the building's occupants.

To achieve these goals, an integrated design process was established at the outset of the project with everyone involved—including the design architect, architect-of-record, mechanical and electrical engineers, cost estimators, and many others.



Manitoba  
Hydro

**President and CEO Bob Brennan at the ceremony announcing the completion of concrete placement on the 22nd floor—a milestone construction event.**

## A world leader in energy efficiency

Key to achieving the 60 per cent target at the corporate office is a climatically-responsive design that takes full advantage of the passive and natural energy systems in our environment, particularly the sun. In so doing, the use of energy-intensive mechanical systems, such as pumps and fans, is greatly minimized.

The building's structure, mainly comprised of 35 600 cubic metres of concrete, creates a thermal mass which moderates the impact of the extreme temperature swings in Manitoba's climate. In addition, radiant heating and cooling located in the concrete keeps the thermal mass at a comfortable temperature year round.

The downtown site accommodates a unique design which incorporates splayed twin towers that rest on a podium that varies from two to three storeys. This form and the building's orientation maximize daylight and optimize passive systems for ventilation, heating, and cooling. The two 18-storey towers, joined by three six-storey winter gardens or atria, face directly south to take full advantage of passive solar energy arising from Winnipeg's abundant sunlight. By minimizing the north facing surface area, the building's triangular form reduces energy loss. Double-curtain glass walls on the east and west facing tower facades also act as buffers—reducing heating and cooling requirements in extreme temperatures.

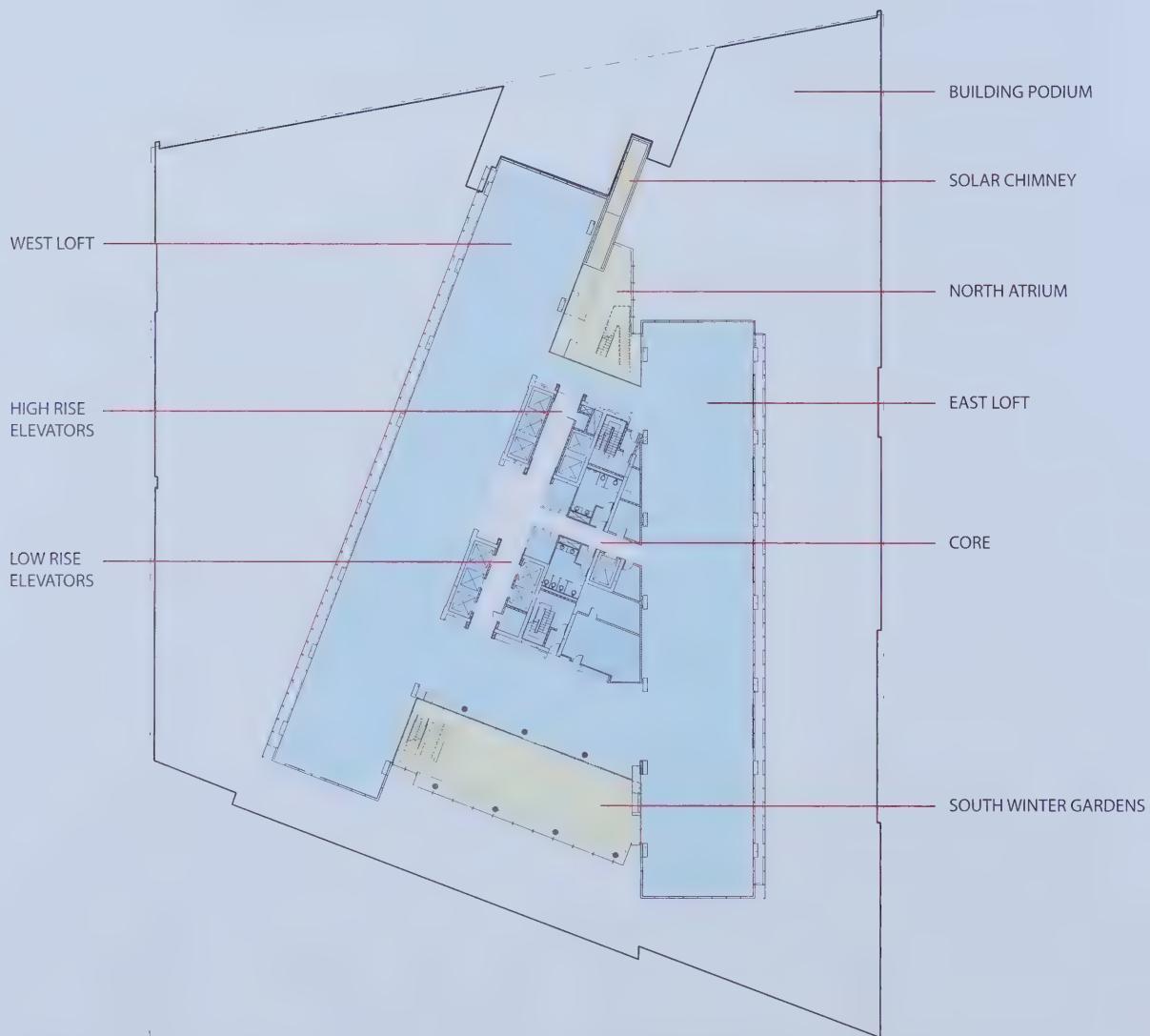


Diagram showing the building's core elements and orientation: the splayed towers on top of the two and three-storey podium.

## The largest geothermal system in Manitoba

Manitoba's largest geothermal system is the heart of the building's heating and cooling system. The geothermal field, a closed-loop system located underneath the building, consists of 280 boreholes—15 cm wide and 122 metres deep—interspersed between a multitude of foundation piles and caissons. Each borehole contains tubing filled with glycol that runs to the bottom of the hole and back to the top. In summer, the glycol—warmed by heat extracted from the building—is pumped into the ground and cooled by the ground's colder temperature before it returns to the surface. It then passes through the heat pump in the building's basement mechanical room. From here, cooled

water is circulated in the tubes located in the ceilings, providing 100 per cent of the air conditioning needed for the building.

In the winter the process is reversed. The glycol is heated as it is circulated through the system in the ground. The warm glycol passes the heat via a heat exchanger into the radiant concrete ceilings—providing space heating to the building. Through this system, the geothermal installation provides approximately 60 per cent of the heating with energy-efficient boilers providing the balance.



Clockwise from top left: Construction takes place on a variety of fronts in April, July, August, October 2007.

## A healthy and productive work environment

All air entering the building during the summer and winter months passes through the south winter gardens, where it is conditioned for entry into the building. The winter gardens use the sun's energy to heat the air and 21-metre waterfalls to humidify or dehumidify the air, depending on the season. In the winter when the air is dry, the air passes through the waterfall picking up moisture and increasing humidity to an acceptable level. In the summer, hot, humid air is cooled as it passes through the waterfall which is operated at a colder temperature. This reduces the air's capacity to carry water which, in turn, lowers the humidity. During the winter months, the air is heated by the direct sun exposure.

The conditioned air is distributed through the raised floor in the building which acts as a plenum for the ventilation system. The fresh air enters through grills in the floor and rises to the ceiling as it's heated by building occupants and other sources, such as electronic equipment.

The air is exhausted passively by the 115-metre high solar chimney, which simultaneously pulls fresh air into the building's ventilation system. This system provides 100 per cent fresh air at all times, compared to a typical North American building where as much as 80 per cent of the air is re-circulated. In winter, the exhaust air from the building is drawn to the bottom of the solar chimney by a fan. The heat from this exhaust air is used to heat the parkade and also to pre-heat the incoming cold air in the south atriums. The combination of the pre-heating by the exhaust air and the passive solar gain in the atriums brings the fresh air to comfortable room temperature with minimal energy.

During the spring and fall, most of the mechanical ventilation system will be turned off. The building will be passively ventilated by fresh air which enters the building through occupant-controlled windows and is drawn naturally through the building by the solar chimney.

Recognizing the importance of natural light to create a healthy and productive workplace, the building design incorporates high ceilings, narrow and unobstructed floor plates, and a fully glazed building envelope. The envelope uses low-iron glass which improves natural light transmittance. These features ensure maximum exposure to natural daylight and reduce the need for artificial lighting systems. The artificial lighting is enhanced by an energy-efficient, fully automated lighting system.



**Topping off: Pouring concrete on the building's 22nd floor.**



**A worker prepares a section of the internal glass wall prior to installation.**



**Manitoba Hydro Place, 360 Portage Avenue:** Glass installation nears completion on the splayed towers of the building's striking southern exposure. In this photo, the windows were yet to be placed on the south winter gardens.



## Recycling

To minimize the amount of material that would be sent to landfill, existing buildings on the site were deconstructed rather than demolished prior to the start of construction. Over 90 per cent of the material from the buildings was salvaged and is either being re-used or recycled. For example, some of the wood taken from the site will be used for the butcher-block benches in the south winter gardens and the underside of the retail and south side podium canopies.

## Preparing for the move

In anticipation of the completion of construction, plans were put in place for the staged move of some 2 000 employees to the new downtown location.

To view construction progress and help employees become familiar with the building, weekend guided tours of the construction site were offered in May and November 2007. In late February and early March 2008, employees locating to the new office were provided the opportunity to attend orientation briefings which included a welcome from the Downtown Winnipeg Biz Association. Information on building design and energy efficient features, building security and safety, and work spaces, amenities and technologies, were also presented. Of particular interest was the opportunity to view prototypes of the work stations that have been designed specifically for the new building.

In keeping with the sustainability principles inherent at 360 Portage Avenue, Manitoba Hydro has promoted green commuting options for travel to and from work. The building provides excellent transportation connections to major public transit routes—operating on both Portage and Graham avenues—and a direct connection to the downtown elevated walkway system.

**Staff in large numbers took the opportunity to visit the site in one of several building tours offered throughout the year.**



Once again, customers rated Manitoba Hydro's overall service levels amongst the highest of all Canadian electric utilities.



Crews repair distribution lines in scenic Whiteshell Provincial Park following a severe summer storm in the area.

## Manitoba Hydro ranked highest in customer satisfaction in J.D. Power report

In a study released by J.D. Power and Associates in August 2007, Manitoba Hydro ranked highest overall in satisfying residential electric utility customers. This 2007 Canadian Electric Utility Residential Customer Satisfaction Study measured customer satisfaction based on responses from customers served by the 14 largest retail electric utility companies in Canada, which collectively represent more than 10 million residential customers.

## Advanced metering pilot assessed

The benefits experienced from a sample group of customers using advanced metering technology are currently being assessed. The pilot program, which started in 2007, includes the use of advanced meters for 5 000 electricity and 1 000 natural gas customers in various Winnipeg neighbourhoods as well as 200 electricity customers in the Landmark area.

The potential benefits being explored include improved system reliability, accuracy in metering and billing, and enhanced energy conservation. The meters are also anticipated to provide the capability of additional new services, such as flexible rate plans, time-of-use information, in-home energy use display, and faster response times for power outages and restorations.

## Natural gas service

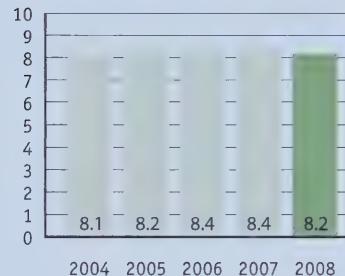
The corporation distributes natural gas to approximately 260 000 customers located in various communities throughout Manitoba. Rates for natural gas are adjusted quarterly, based on the same price that Manitoba Hydro pays to purchase natural gas from Alberta.

The corporation helps lessen the impact of gas price volatility through the use of a hedging strategy, gas storage, as well as through the quarterly adjustment of gas rates.

Through the derivatives hedging strategy, natural gas volatility was reduced by 43 per cent during the year. In addition, the following quarterly adjustments to natural gas prices were implemented: May 2007 (4.5 per cent increase); August 2007 (1.8 per cent decrease); November 2007 (3.4 per cent decrease); February 2008 (1.2 per cent increase). All percentages are based on an average annual increase or decrease for residential natural gas customers.

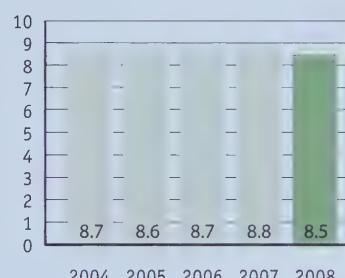
### Customer satisfaction with overall service

(Source: MH quarterly Customer Satisfaction Tracking Study)



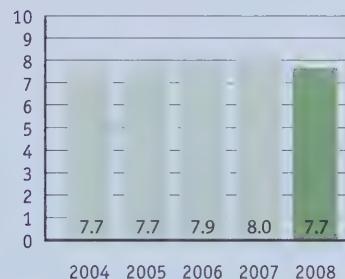
### Customer satisfaction with system reliability (electricity)

(Source: MH quarterly Customer Satisfaction Tracking Study)



### Corporate citizenship index

(Source: MH quarterly Customer Satisfaction Tracking Study)



## **Summer storm creates widespread damage**

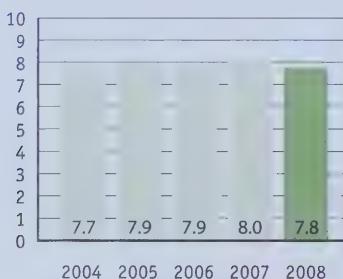
Severe spring and summer storms are not unusual in Manitoba but the weekend of June 22, 2007 was of a magnitude rarely seen by the most experienced customer service staff.

Extensive damage caused by a tornado just west of Winnipeg left thousands of customers without electricity. Roughly 200 wood poles and several transmission towers were knocked down in the Elie and Oakville area alone. In spite of the damage left in the tornado's path, all electrical service was restored by Manitoba Hydro crews in two days. The event marked the first Level 5 tornado ever recorded in Canada.

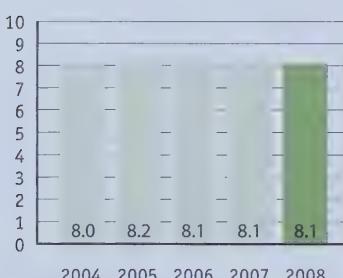
Damage to a host of towns and communities further west from a separate storm system was even more severe, leaving many more thousands of customers without power for longer periods.

On the same weekend, a large area of the Whiteshell Provincial Park was also affected by extremely high winds which knocked over distribution poles and brought down powerlines—primarily at Betula Lake. A concentrated effort by line crews in the recreational area had service to all cottage-owners completely restored by the following weekend.

Corporate citizenship (environmental component)  
(Source: MH quarterly Customer Satisfaction Tracking Study)



Corporate image index  
(Source: MH quarterly Customer Satisfaction Tracking Study)





A Level 5 tornado—the first ever recorded in Canada—flattened buildings and the electrical infrastructure near the towns of Elie and Oakville in June 2007.



THE WINNIPEG  
HUMANE SOCIETY



**Using our resources wisely through responsible stewardship and prudent energy management has been a part of Manitoba Hydro's philosophy well before the formal introduction of Power Smart programs in 1991. It's estimated that Manitobans have prevented over 965 000 tonnes of carbon equivalents from being released into the atmosphere and have saved about \$275 million on their energy bills through their participation in Power Smart programs.**

### **Winnipeg Humane Society receives Power Smart designation**

The new home for the Winnipeg Humane Society opened its doors in September 2007 and received a Power Smart Design Standard designation. The building is projected to have an energy performance that is at least 37 per cent higher than the Model National Energy Code of Canada, which was achieved by: installing higher insulation levels in walls and roof; energy-efficient windows and lighting; and parking lot controllers.

### **Enhancements to Residential Earth Power Loan**

In April 2007 Manitoba Hydro increased the maximum for the popular Residential Earth Power Loan from \$15 000 to \$20 000 and reduced the interest rate from 6.5 per cent to 4.9 per cent for the first five years. The 15-year loan, offered through the Earth Power Program, provides convenient financing to homeowners installing geothermal heat pump systems in their residences.

The initial cost of installing a geothermal heat pump is more than a conventional system but can reduce annual home heating costs by 50 to 70 per cent. The technology can also greatly reduce household greenhouse gas emissions, making it an environmentally-friendly home heating system.

In 2007 Manitobans installed over 920 geothermal heat pump systems, a 40 per cent increase over 2006. Since 2000, geothermal heat pump sales in Manitoba have increased 350 per cent. The increase in installations represents 20 to 30 per cent of all Canadian activity, making Manitoba the per capita leader in the adoption of geothermal heat pump technology.

### **New Commercial Earth Power Program launched**

The Commercial Earth Power Program was launched in June 2007 to provide financial incentives to customers to offset conventional electric space heating with geothermal heat pump systems for their commercial buildings. In total, over 43 commercial project applications were received in the fiscal year, requesting over \$500 000 in project incentives.

Manitoba Hydro has supported the installation of geothermal heat pump systems in commercial businesses since 1996. Since then, both local and national geothermal industries have experienced exponential growth.

## **Natural gas improvements at Diageo Canada Inc.**

Diageo Canada Inc.—one of the world's leading premium drink companies—applied Power Smart technologies at its Gimli plant to improve efficiency and lower its energy bills. The plant, which produces enough Crown Royal whiskey to fill 1 000 barrels a day, has acted on the results of a feasibility study by the utility's natural gas efficiency experts. The plant's old boilers have been replaced with energy-efficient versions, complete with improved control systems.

## **Food services take advantage of Commercial Kitchen Appliance Program**

Energy use in food service businesses are extremely energy intensive, with up to 30 per cent of the annual energy bill consumed by food preparation appliances. The Commercial Kitchen Appliance Program is designed to encourage customers to replace their less efficient kitchen appliances with ENERGY STAR® qualified appliances. Appliances eligible for rebates are open deep-fat fryers (gas only) and steamers (electric and gas).

## **ING Real Estate**

When ING Real Estate moved into their new headquarters in Winnipeg in 2007 they benefited substantially from Manitoba Hydro's recommendations for energy-saving improvements. ING replaced their T12 fluorescent lights with T8s and also used T5 and pulse-start lights in their showroom. In addition, ING took Manitoba Hydro's advice and rebuilt their roof to R25 insulation levels. It's expected that the insulation improvements alone will help save the company almost \$44 000 annually.

## **Niverville Credit Union**

The Niverville Credit Union and Heritage Centre Atrium was designated a Power Smart facility in May 2007. The building's energy performance is estimated to be 45 per cent more efficient than a building designed to meet the Model National Energy Code of Canada. It received the designation by incorporating a geothermal heating and cooling system, energy-efficient windows, higher insulation levels in walls and roof, and compact fluorescent lights (CFLs) in the hallways and atrium.

## **Lower Income Energy Efficiency Program**

In December 2007 the Power Smart Lower Income Energy Efficiency Program was announced to provide financial assistance for lower income households to access energy efficiency programs.

Qualifying lower income households are eligible for energy retrofits ranging from basic energy saving devices such as CFLs, to adding insulation, to upgrading from a standard efficiency natural gas furnace to a high efficiency natural gas furnace. It's estimated that approximately 1 200 households will participate each year—saving approximately \$250 annually on their energy bills.

## **Improved Home Audit Program**

Manitobans can now access both Power Smart incentives and new federal ecoENERGY grants through a low-cost home audit service. Also announced in April 2007, the federal government's ecoENERGY Retrofit Program provides financial assistance to Canadians for energy-efficient retrofits to their homes.

Federal grants of up to \$5 000 are available to homeowners depending on what energy improvements are made to their homes. The cost of the pre-retrofit evaluation is \$280, but with the province of Manitoba and Manitoba Hydro paying \$100 of this fee, homeowners only pay \$180, plus GST. Under the previous federal program, 22 000 energy evaluations were performed in Manitoba.

**Natural gas efficiency improvements were made at the Diageo beverage plant in Gimli. Standing left to right are Kevin Rogers, Neil Kostick (Manitoba Hydro), Tom Ostapovitch, and Doug Weedon.**



## **Efficient fluorescents add safety and productivity at INCO and Manitoba Hydro**

When International Nickel Company's (INCO) plant in Thompson wanted to save energy and improve visibility in its mechanical shops, Manitoba Hydro's lighting experts recommended a switch to energy efficient T8 fluorescents. T8s provide a more visible white light compared with the greenish hue of the old mercury-vapour lights in the shops. The new fluorescents also cast fewer shadows, turn on instantly, and have cut lighting consumption in half at INCO.

Some of Manitoba Hydro's facilities are benefiting from the same technology. At the Great Falls Generating Station on the Winnipeg River, the station has upgraded its lighting in the high-voltage switchyard. The white light of the T8s helps with equipment inspection and eliminates cable colour recognition issues.

## **Improved power factor at Water Pollution Control plant**

The installation of a new power factor correction system at Portage la Prairie's Water Pollution Control plant has reduced the facility's electric bills by 15 per cent—equalling savings of \$50 000 in the first year of operation.

Power factor is a measure of how effectively electrical power is being used. The new system boosted the plant's average power factor from 82 to 98 per cent.

## **CPR finds smaller is better**

At its Weston Yards in Winnipeg, the Canadian Pacific Railway downsized a large, centralized compressed air system in favour of using three smaller and more efficient systems. The smaller 300 horsepower systems take advantage of variable speed drives to reduce electricity consumption and create better heat recovery to reduce natural gas use.

## **SMART Ideas a smart idea**

Manitoba Hydro partnered with CTV-TV for a third season on a series of 60-second information spots on Power Smart tips and other public safety topics. In place since 2005, a total of 36 separate segments have aired, covering a variety of residential energy savings tips and important home and farm safety topics.

# *Cwards and recognition*

## **Best Practices Award for Commercial Refrigeration Program**

The Commercial Refrigeration Program received the second place award in Chartwell's Best Practices Award Competition in the category of Fostering Relationships with Mid-size Businesses in April 2007. The program was singled-out for improving the energy efficiency of refrigeration technologies, which can often be 40 to 60 per cent of food retail and restaurant energy bills.

## **Natural Resources Canada Award for Corporate Stewardship**

With the assistance of Manitoba Hydro's Power Smart programs, MJ Roofing of Winnipeg won Natural Resources Canada's Award for Corporate Stewardship in 2007. MJ Roofing won the Canadian Industry Program for Energy Conservation Award by installing energy-efficient T5 fluorescent fixtures, new high performance windows, and insulation upgrades.

## **Energy improvements at Asessippi**

Energy enhancements at the Asessippi ski resort near Russell, Manitoba have greatly reduced the uncertainties of running a downhill ski operation. Manitoba Hydro's energy experts convinced the resort to switch from conventional energy-intensive snow-making equipment to a newer version that uses water rather than compressed air.

Other cost-saving measures incorporated at Asessippi include energy-efficient lighting, automated electrical load management, and power factor corrections, which have slashed the popular resort's electrical bills by more than 30 per cent.



**Clean, self-renewing water power—produced at 14 hydroelectric generating stations primarily on the Winnipeg, Saskatchewan, and Nelson rivers—is the principal source for virtually all of Manitoba’s electricity requirements. Power produced in excess of Manitoba’s domestic requirements is sold to neighbouring utilities through the export market.**

### **Wuskwatim Generating Station**

Significant construction progress was achieved this year at the site of the Wuskwatim Generating Station, the first new hydro-electric facility to be built in the province since Limestone in the early 1990s. Wuskwatim, located 45 km southwest of Thompson on the Burntwood River, is being developed by the Wuskwatim Power Limited Partnership (WPLP), a legal entity involving Manitoba Hydro and the Nisichawayasihk Cree Nation.

Activity this year centred around the completion of the all-weather access road to the site, establishing and operating the construction camps, and excavation work on the intake and tailrace channels. Approximately 2.2 million cubic metres of granular material was excavated and placed on the 48 km access road that runs from Provincial Road 391 to the station.

At year's end the main construction camp was nearly complete—including housing for over 600 workers. Included at the camp are water and sewage treatment plants and associated infrastructure, an ambulance and fire building, and a kitchen and dining complex. Work on the recreational facilities and cultural area was also undertaken. The scope of the civil work included the excavation of approximately 525 000 cubic metres of materials from the spillway channel and principal structures area and the completion of the rock fill portions of stage one upstream and downstream cofferdams in the river.

Environmental, social, and economic monitoring continued at Wuskwatim and is being conducted in accordance with the terms and conditions issued by provincial and regulatory agencies. Monitoring on the Burntwood River that took place in the open water season of 2007 provided the last year of baseline information before construction began in the waterway this winter. During installation of the cofferdams, sediment levels were monitored in the river and results demonstrated that water quality was not affected.

Project employment peaked at just over 400 workers throughout the past year and approximately two-thirds of the workers were Aboriginal. Several symbolic site ceremonies were performed at key construction milestones as the project progressed—a first in the history of Manitoba Hydro's major construction projects.

In June 2007, virtually all major heavy construction contractors in Canada were extensively committed to other projects and Manitoba Hydro did not receive any acceptable bids for what is known as the General Civil Contract. In order to maintain Wuskwatim's planned in-service date of 2012, the corporation divided the work into several smaller contracts and changed the format so as to attract a reasonable number of proposals.



**Construction on the Slave Lake Dam at the Wuskwatim Generating Station site was in full force in early 2008.**

## **Wuskwatim Power Limited Partnership**

The Wuskwatim project marks the first time an electric utility and a First Nation have entered into a comprehensive partnership to develop a generating station. Following the signing of the Project Development Agreement in June 2006, Manitoba Hydro and the Nisichawayasihk Cree Nation (NCN) became official business partners in the Wuskwatim project. WPLP's business affairs are carried out by a general partner—a wholly-owned subsidiary of Manitoba Hydro. The subsidiary is governed by a Board of Directors consisting of four Manitoba Hydro employees and two NCN representatives.

## **Keeyask Generating Station**

During the year, the corporation continued engineering activities, environmental studies, consultations, and negotiations on the proposed Keeyask Generating Station. If approved, Keeyask—which is located about 30 km upstream of the Kettle station on the Nelson River—will generate roughly 695 megawatts. The consultations and negotiations were focused on the project's Cree Nation partners: Tataskweyak Cree Nation, War Lake First Nation, York Factory First Nation, and Fox Lake Cree Nation. A joint agreement will set out the way in which these communities will participate in developing Keeyask.

Members of the Cree Nations continued their involvement in training for potential jobs on Keeyask, which could be in-service as early as 2017.

## **Conawapa Generating Station**

The Conawapa site is also located on the Nelson River, downstream of the Limestone station, and has a scheduled in-service date of 2021 to meet Manitoba's future load growth.

Process agreements for the planning and development of Conawapa have been signed with all the First Nations who are in the vicinity of the project, including Fox Lake Cree Nation, York Factory First Nation, Tataskweyak Cree Nation, and War Lake First Nation. A Letter of Agreement was also entered into with Shamattawa First Nation in June 2007 which provides for their participation in Conawapa planning activities.

Planning and consultations related to Conawapa will involve discussions relating to project description, environmental and regulatory matters, training, employment and business opportunities, and the negotiation of adverse effects arrangements. In collaboration with the affected Cree Nations, bio-physical field studies have been initiated at Conawapa.



**Kelsey Generating Station's spillway at sunset, with the powerhouse and switchyard visible in the background.**

## **Rebuilding Pointe du Bois**

Pointe du Bois is Manitoba Hydro's oldest generating station, first producing power in 1911. The facilities at the station require major repair or replacement to maintain public and dam safety standards, provide a safer working environment for staff, and ensure reliable power production.

Rebuilding Pointe du Bois will involve the construction of a new powerhouse, spillway, and dam adjacent to the existing powerhouse and the decommissioning of existing structures on completion of the modernization. In addition, modern equipment will increase the station's capacity from 78 megawatts to approximately 120 megawatts.

Manitoba Hydro started the regulatory process to rebuild Pointe du Bois in August 2007 by filing an Environmental Act Proposal with Manitoba Conservation. As part of the environmental assessment, open houses were held in the fall of 2007 to provide the public with information and to receive feedback about the modernization project. The corporation also met with officials from the Sagkeeng and Brokenhead First Nations. Environmental assessment, trade design, and pre-construction planning activities are ongoing.

## **Kelsey Generating Station continues upgrades**

In keeping with plans to re-runner all of its generating units, Kelsey Generating Station's Unit 5 was returned to service in September 2007 after a 10-month outage. The work on the unit included a new turbine runner, generator transformer, and generator winding, which resulted in a 10.6-megawatt increase in output. When all of Kelsey's units are re-runnered, it's expected that approximately 80 megawatts will be added to the station's capability.

## **Salvaged transformers from Kelsey used at Pointe du Bois**

One of the many benefits of the turbine re-runnerring project at the Kelsey Generating Station was the ability to transfer the plant's salvaged transformers to the Pointe du Bois station on the Winnipeg River. The salvaged transformers were installed at Pointe to upgrade the plant's generation output.

## **Wuskwatim garners environmental award**

The corporation received a special award from the Canadian Electricity Association (CEA) in February 2008 in recognition of Manitoba Hydro and NCN's unique partnership. Among other accolades, the award acknowledged that the partnership is serving as a model for future resource development, not only within Manitoba, but throughout Canada and around the world.



**President and CEO Bob Brennan accepts the Environmental Stewardship Award from CEA President Hans Konow.**



A re-runned turbine at Kelsey Generating Station, prior to installation.

## Potential new wind power near St. Joseph

In 2007 Manitoba Hydro issued a request for proposals for up to 300 megawatts of new wind projects in addition to the existing 99-megawatt St. Leon wind farm. From the 84 proposals, a short list of 10 was given the opportunity to provide further information. From these a proposed project near St. Joseph, Manitoba was selected for further discussions with the developer.

## Power Purchase Agreement with Minnesota Power

In December 2007 Minnesota Power and Manitoba Hydro signed a Term Sheet which sets out terms for a surplus energy sale beginning in 2008 and a 15-year purchase agreement for 250 megawatts of firm power commencing in 2020.

## Power Purchase Agreement with Xcel Energy

During the year Manitoba Hydro and Xcel Energy continued negotiations of the definitive agreements related to the Term Sheet signed in October 31, 2006. The Term Sheet outlines the details for a 375-megawatt power purchase agreement and a 350-megawatt seasonal diversity sale agreement—both of which would commence in 2015 for a 10-year period. Xcel Energy filed the Term Sheet as part of their preferred resource option with the Minnesota Public Utilities Commission.



The St. Leon wind farm in summer with just a portion of its 63 turbines visible.

## **Power Purchase Agreement with Wisconsin Public Service**

At the end of the fiscal year, Wisconsin Public Service (WPS) and Manitoba Hydro signed a Term Sheet which sets out the terms for a 15-year purchase agreement for 500 megawatts of firm power commencing in 2018. WPS sees this long-term purchase from Manitoba Hydro as a means of providing its customers with clean, carbon-free energy.

These agreements provide Manitoba Hydro with an opportunity to plan construction of major new hydroelectric generation in northern Manitoba and major new transmission facilities between Canada and the United States.

## **Converter transformers replaced**

Five converter transformers at the Dorsey, Henday, and Radisson converter stations were replaced this year to ensure the essential conversion process at the stations remained seamless. Ranging in cost from \$5 million to over \$7 million each, replacing five massive transformers in a single year was a major accomplishment. Located just northwest of Winnipeg, Dorsey is the southern terminus of the HVDC system while Radisson and Henday together form the northern terminus.



Manitoba Hydro's transmission and distribution system—which includes one of the longest high voltage direct current lines in the world—forms the critical delivery network for all of the electricity supplied domestically and for the export market. The infrastructure is constantly monitored and tested to ensure the system is robust and reliable.



## Public consultation underway for Riel

In October 2007, the corporation hosted a public open house in Oakbank, Manitoba to share information on a new project that will improve the reliability of the utility's existing transmission system.

The Riel Reliability Improvement Initiative will break the existing 500-kV transmission line that runs from Dorsey Station northwest of Winnipeg to the Forbes Station in northeast Minnesota, and insert a new terminal station at the Riel site—located immediately east of the city and the Red River Floodway.

The 500-kV line will effectively become two transmission line sections linking three terminal stations—Dorsey, Riel, and Forbes. These modifications will create an alternate point at which electricity imported from the United States on the 500-kV line can be redirected into southern Manitoba's 230-kV transmission system.

Approximately 75 per cent of Hydro's generating capacity is delivered to southern Manitoba via the two high voltage direct current (HVDC) transmission lines that run through the province's Interlake. These lines connect generating stations on the Nelson River near Gillam to the Dorsey Converter Station, just northwest of Winnipeg. At Dorsey, the electricity is converted to AC and delivered to users throughout southern Manitoba using a network of 230-kV transmission lines and stations—and to export customers using a number of interconnections with neighbouring provinces and states. The 500-kV interconnection to Minnesota, in particular, is critical to the utility's ability to import the electricity needed to supply Manitoba during periods of prolonged drought or prolonged outages.

The sectionalization of the 500-kV line will ensure energy flows can be maintained in the event of an outage at the Dorsey Converter Station, an outage at the 500-kV station adjacent to Dorsey, the loss of the HVDC transmission system, or the loss of any one of the transmission lines that are a part of the north corridor right-of-way near Winnipeg that includes the 500-kV line and numerous 230-kV transmission lines.

After the public consultation process is completed, an Environmental Impact Statement will be prepared and submitted to government regulators for the required environmental approvals. Once the necessary approvals are obtained, construction on the Riel Reliability Improvement Initiative project will begin. The station is anticipated to be in-service by 2014.

## West side transmission line

In September 2007 Manitoba Hydro announced that it would move forward with plans to build the new Bipole III HVDC transmission line on the west side of the province.

The proposed line will originate near Gillam, run to the west of Lake Winnipegosis, and terminate at the Riel Converter Station near southeast Winnipeg. The precise route will be determined after a multi-year environmental assessment, design, and public consultation process. Once the project design and route have been finalized, the corporation will secure the environmental approvals necessary for construction.

Bipole III will be the province's third major north-south transmission line—purposely located at some distance away from the existing lines for reliability and security reasons. The new line will lessen the province's reliance on the two existing bipole lines.

The Bipole III transmission line is a project of critical importance to Manitoba Hydro and will substantially improve the reliability of the electrical system for all Manitobans.

## Progress on Wuskwatim transmission continues

A separate component of the Wuskwatim Generating Station is the project's transmission system, required to deliver the station's 200 megawatts into the existing electrical grid. The system includes two new stations, four new 230-kV transmission lines, and upgrading existing stations to accommodate the new infrastructure.

## Wuskwatim transmission facilities





Construction crews connect the 230-kV transmission link to the Wuskwatim Generating Station site.



The sun sets on a northern transmission line near Manitoba Hydro's Notigi Control Structure.

## **Preparing for the unexpected**

The adage of preparing for the unexpected is one of many reasons Manitoba Hydro's Emergency Preparedness Plan is monitored and tested year-round. In early March 2008, another emergency response exercise tested the extent of corporate-wide preparedness yet again.

Using the simulation of a widespread and prolonged ice storm, staff and executive responded to the scenario as though it was an actual situation and in the process helped test aspects of the program. Also included in the exercise were external stakeholders such as the province's Emergency Measures Organization, Winnipeg Regional Health Authority, and the City of Winnipeg.

## **Managing copper theft**

Manitoba Hydro, like many other North American utilities in 2007, experienced an increase in the theft of copper cable from its substations and distribution ground wires. In addition to the nuisance costs, copper theft creates safety hazards to employees and the public, both by diminishing the electrical protection within the station, and in creating an uncontrolled access into a station. The utility took several measures to address the problem, including improved station security, a streamlined reporting process, a stronger partnership with police services, and revised material storage policies.

## **WIRE Services**

Worldwide Integrated Rating Enhancement (WIRE) Services collects data from transmission lines and structures through helicopters equipped with LiDAR scanning technology. The time-saving technology provides invaluable technical information on transmission lines, such as the maximum thermal operating limit of the lines relative to specified ground clearance and vegetation interference.

Since its creation seven years ago, WIRE Services has flown over 20 000 linear km of transmission lines and routes for utilities in North and Central America. During the fiscal year, an additional 4 616 km of transmission lines were flown—including 551 km for Manitoba Hydro. Four new clients were added to its growing client base in the year, bringing the total number to 19.

WIRE Services is a Manitoba Hydro business initiative with Calgary-based LiDAR Services International.

**A helicopter equipped with LiDAR scanning technology used by WIRE Services.**



## NERC compliance

As a member of the North American Reliability Corporation (NERC), Manitoba Hydro worked to document its compliance with all NERC electric reliability standards this year. The standards have become mandatory in recent years, due in part to the international response to the blackout that cascaded through eastern Canada and the United States in August 2003.

The utility industry has been advised that standards for transmission rights-of-way vegetation management and system protection are a particular priority and that strict regulation and enforcement in these areas will be expected. As a result, aerial surveys of all 230-kV and above transmission lines in trouble areas have been identified. Manitoba Hydro's compliance program also includes cyber-security for its critical assets and facilities.

NERC makes reliability standards for the entire continental power grid and works with eight regional entities to improve the reliability of the bulk power system. Its members come from all segments of the industry: investor-owned utilities; federal power agencies; rural electric cooperatives; state, municipal and provincial utilities; independent power producers; power marketers; and end-use customers.



**One of Manitoba Hydro's principal goals is to be proactive in protecting the environment and the leading utility in promoting sustainable energy supply and service. During the year, the utility made substantial progress towards its environmental targets on many fronts.**





### **Chicago Climate Exchange**

The corporation is participating in the second phase of the Chicago Climate Exchange (CCX), which will run from 2007 until 2010. Participation in the CCX requires that the corporation reduce its emissions from historic levels by an increasing percentage every year. The commitment will require an emissions reduction of six per cent by 2010—compared to average emissions recorded during the years 1998 to 2001.

Manitoba Hydro has been in full compliance with the CCX target since joining as a founding member in 2003. In early 2008, the corporation was recognized by CCX for its leadership in promoting best practices in GHG management and corporate sustainability. The corporation was also noted for complying with the most rigorous standards for GHG emission reductions currently available in North America.

Another GHG commitment—separate and distinct from CCX—is the voluntary commitment originally established under the national Voluntary Challenge and Registry program in 1998. Under the voluntary registry, Manitoba Hydro is committed to reduce its average net GHG emissions to six per cent below 1990 levels.

### **Supporting the solar greenhouse**

Manitoba Hydro, together with the province's greenhouse industry and other stakeholders, supports research on a type of solar greenhouse popular in northern China, where winter temperatures are comparable to those of southern Manitoba. The research, which began in earnest after a spike in natural gas prices in 2003, presents an opportunity to benefit the province's greenhouse growers by lowering their space-heating costs.

**A denizen of the north poses casually on the outskirts of Churchill, Manitoba.**

## **Endangered species on St. Leon to Brandon fibre optic route**

The Prairie Skink—a lizard listed as endangered under the Canadian Species At Risk Act—was discovered on the proposed St. Leon to Brandon fibre optic route. A plan was developed to avoid known nesting sites and to limit the travel and disturbance to the skink's potential habitat areas. Several instances of Small White Lady's Slipper—a plant listed as endangered under both the Manitoba Endangered Species Act and the Canadian Species At Risk Act—was also found on the St. Leon to Brandon fibre optic route. By employing horizontal directional drilling under the area instead of typical cable ploughing, the plant's environment was preserved.

## **Exploring switchgrass as a biofuel**

In 2007 Manitoba Hydro helped finance a feasibility study on developing biofuel from switchgrass, a warm-season perennial plant native to the North American tall-grass prairie. When packed in pellets and burned in properly designed stoves, switchgrass lowers space and water heating costs compared with fossil fuels and, in turn, produces fewer emissions.

## **Biomass research**

Manitoba Hydro is supporting research at the University of Manitoba that is currently investigating the feasibility of heat and power systems that use biomass, such as harvested plant material. The project is using cattails from the Netley-Libau Marsh at the south end of Lake Winnipeg. Bio-energy is becoming increasingly attractive as an energy source because the fuel is often readily available and using plant material is considered carbon neutral.

## **Cleaner Air for Kids**

Through its Fleet Services department, Manitoba Hydro is using biodiesel blends at its facility on Notre Dame Avenue in Winnipeg. Last year, Winnipeg School Division #1 and Manitoba Hydro entered into a partnership to test biodiesel in four school buses. Manitoba Hydro agreed to fuel the buses at its Notre Dame site for a test period stretching from February to December 2007. As a result, the Winnipeg School Division is using biodiesel in 90 per cent of its buses.

## **Grand Rapids Walleye Spawning Program**

Every year since 1997, a seven-week spring spill has been initiated in the Grand Rapids Generating Station spillway channel to support the walleye spawning enhancement program. The goal of the program is to determine if a natural self-sustaining walleye spawning population can be established within the spillway channel bed. The program is carried out with the participation of the Grand Rapids First Nation, the Grand Rapids Fisherman's Co-op, Manitoba Water Stewardship and the federal Department of Fisheries and Oceans.

## **Environmental Partnership Fund**

Through its Environmental Partnership Fund, the corporation annually assists with a broad range of environmental initiatives and community-based projects in Manitoba. This year, 36 separate projects were included, either through direct funding support or with support in kind.

## **Forest Enhancement Program**

The highly successful Forest Enhancement Program awarded 38 applications for tree plantings, forest education initiatives, and innovative university research projects in the fiscal year. Rural and urban community organizations throughout Manitoba continue to show a high level of local enthusiasm for tree planting projects. Initiatives from Manitoba Communities in Bloom, the Manitoba Conservation Districts Association, the Manitoba Forestry Association, and Manitoba Model Forest, spearhead many tree planting and education projects.

The Forest Enhancement Program promotes forest ecology and environmental education for all school tree planting projects, linking sustainability with curriculum outcomes.

## **Education for sustainable development**

Due to the very positive response of educators province-wide, Manitoba Hydro—in cooperation with Manitoba Education, Citizenship and Youth—extended the Education for Sustainable Development Grants Program for two more years. The provincial government and Manitoba Hydro jointly support schools in which educators plan and teach sustainability-focused units.



**Catch and release:** Students supported by Manitoba Hydro tag young sturgeon on the Winnipeg River in order to study their growth, movement, and population.

Establishing supportive and lasting relationships with employees, customers, suppliers and other stakeholders is one of Manitoba Hydro's chief operating principles. Encouraging diversity and strengthening its relationships with Aboriginal peoples are also goals of fundamental importance. Within its ranks the corporation contains a multitude of occupations, such as accounting professionals, human resource staff, and line trades experts. The utility is also the largest employer of engineers in the province.



### Safety first

Manitoba Hydro made significant improvement to its employee safety performance record over the year. Enhancements through job planning, greater emphasis on site visits, and increased accountability at all levels of the organization have contributed to the positive results obtained during the year. Manitoba Hydro was also awarded the Best Overall Safety Performance for 2007 at the Canadian Gas Association's national conference in Regina.

### Awards, bursaries, and scholarships

The corporation supports the academic development of youth and adults through a large variety of awards, bursaries and scholarships. Taking into account the various academic programs that complement Manitoba Hydro's operations, students have access to over \$100 000 in educational grants. In addition, students who receive the awards are offered employment with Manitoba Hydro over the summer.

### Census shows diversity

A census undertaken in the fiscal year indicates steady progress was made towards increasing diversity in the corporation. For persons of Aboriginal ancestry, representation is 13.3 per cent corporate-wide and 39.8 per cent in the north. Women make up 24.9 per cent of the workforce, and persons with a disability represent 4.5 per cent. Members of visible minorities make up 4.5 per cent while 6.4 per cent of the workforce reports they immigrated to Canada from other countries.

## **Integration for individuals with ABI**

Since being approved as an ongoing employment equity initiative in 2005, the Acquired Brain Injury program has successfully employed six individuals with acquired brain injuries. The Manitoba Employment Equity Practitioners Association recognized Manitoba Hydro's program as a best practice in the spring of 2007.

## **Hydro Northern Training and Employment Initiative**

The Hydro Northern Training and Employment Initiative is a \$60 million pre-project training program designed to provide northern Aboriginal workers with the skills and training they need to prepare for employment opportunities on the Wuskwatim and proposed Keeyask hydroelectric projects. Of the total, the federal government contributes \$30 million, Manitoba Hydro accounts for \$20 million, and the provincial government's contribution is \$10 million.

The Aboriginal partners coordinating the initiative include Nisichawayasihk Cree Nation, Tataskweyak Cree Nation, York Factory First Nation, Fox Lake Cree Nation, War Lake First Nation, Manitoba Keewatinowi Ininew Okimakanak, and the Manitoba Métis Federation. With training in the hands of the partners, members of the respective communities gain valuable experience and skills in managing and administering the training—which also enables leadership skills to be strengthened in the communities.

To date over 1 500 northern Aboriginal people have completed training related to a variety of occupations.

## **Sponsoring the Aboriginal Job Fair**

Manitoba Hydro was the presenting sponsor of the Winnipeg Chamber of Commerce's 7th Annual Aboriginal Job Fair, held in March 2008 at the Aboriginal Centre. The purpose of the Job Fair, which attracted more than 500 people, was to connect job seekers with potential employers. Thirty-nine Manitoba companies and government agencies participated in the fair using workshops that provided job seekers with information on employer expectations.

## **Indigenous Summer Games**

The corporation was a major sponsor of the Manitoba Indigenous Summer Games, held in July 2007 in Thompson. The games drew about 1 000 Aboriginal youth from across Manitoba to compete in such sports as archery, softball, soccer, and canoeing. Local staff from Thompson also participated at the Career Day, where a display featured information on training and recruitment programs.

## **Spirit of the Earth Awards**

Since 2002, the annual Spirit of the Earth Awards program celebrates Aboriginal environmental achievements and culture, publicly recognizing environmentally-focused activities by Aboriginal people, or non-Aboriginal people working in partnership with Aboriginal communities. Manitoba Hydro presented 10 Spirit of the Earth awards on National Aboriginal Day in June 2007 during a special event held in The Pas.

## **Métis of Grand Rapids Agreement**

An agreement was signed and ratified in December 2007 between Manitoba Hydro and the Métis of Grand Rapids to compensate Métis families who moved from Grand Rapids as a result of the construction of the Grand Rapids project in the 1960s.

## **Grand Rapids Summerberry Trappers Agreement**

An agreement was signed and ratified in December 2007 between Manitoba Hydro and Grand Rapids trappers to compensate for project effects that negatively impacted commercial trapping activities in the Summerberry region.



Byron Prince at Winnipeg's Notre Dame office is one of many employees benefiting from Manitoba Hydro's Acquired Brain Injury program.

## **Enhancing employment opportunities**

Enhancing employment opportunities for Aboriginal peoples in the corporation is a major initiative for Manitoba Hydro. The Joint Employment Working Group, consisting of the Aboriginal Council of Winnipeg, Assembly of Manitoba Chiefs, Manitoba Métis Federation, and the Northern Association of Community Councils, continued to meet and advise Manitoba Hydro on strategies to support its Aboriginal employment goals.

A multi-phase employment framework was developed with the Tataskweyak Cree Nation and War Lake First Nation that outlined a number of strategies that could lead to future employment. One of those, a new Work Exposure Program, was developed to provide students and adult learners in the communities with information about different career paths within Manitoba Hydro.

Another community-based strategy for the Cree nations included a five-day seminar in resume writing, interview preparation, e-recruitment, career awareness, and activities designed to give a glimpse into technical trades careers.

## **Northern High School Internship Program**

This year's Northern High School Internship Program saw four students each from Cross Lake and Norway House, and three students from Fox Lake participating in the initiative. The program

gave the students an opportunity to gain a high school credit once they completed a 110-hour work experience project, which was followed with the opportunity for paid summer employment.

Manitoba Hydro also partnered with two University of Manitoba faculties through the Aboriginal Business Education and Engineering Access programs. The Business Education Program supports Aboriginal students in the pursuit of their commerce degree. Four students were successfully recruited into summer positions at Manitoba Hydro with one re-hired from the previous summer. The Engineering Access Program supports Aboriginal students pursuing their engineering degree. Eight students were successfully recruited into summer positions at Manitoba Hydro and one was re-hired from the previous summer.

## **A Festival for All Nations**

Manitoba Hydro once again participated as a sponsor of the second annual Manito Ahbee Festival, held at the MTS Centre in Winnipeg. The 2007 festival was expanded to 10 days during which participants celebrated with Aboriginal music and culture. The festival culminated with the Aboriginal Peoples Choice Music Awards—the highlight of the event.



**National Chief Phil Fontaine and Manitoba Hydro's Shirley Denesiuk present awards at the second annual Manito Ahbee Festival in Winnipeg.**

## Mitigation at Cross Lake First Nation

Manitoba Hydro continued to work with community representatives to develop a fair and equitable implementation structure for the 1977 Northern Flood Agreement (NFA) at Cross Lake. In addition to many ongoing initiatives in the community sponsored by the corporation, several milestone achievements at Cross Lake were reached in the year including:

### Commercial Fishers Settlement Agreement

In early 2007, Manitoba Hydro and a group of Cross Lake commercial fishers worked together to address concerns about the fish harvest on Cross Lake and access to nearby Walker Lake. A settlement agreement was reached that included financial compensation and a 20-year future programming component, with measures to encourage and support commercial fishing in the Cross Lake area—such as portages, satellite phones, and an equipment fund.

### Trappers Agreement

In August 2007 Manitoba Hydro and the Province of Manitoba reached an agreement with the Cross Lake Trappers Association. The agreement deals with adverse effects on commercial trapping in the Cross Lake Registered Trapline District. The settlement provided for retroactive compensation to trappers who held a trapping permit and caught and sold fur during the period from 1995 to 2005. It also features an enhanced package of programming to encourage and support trapping, which will run from 2006 to 2025.

Some of the other initiatives that occurred throughout the year at Cross Lake (from previously established NFA programming) include, but are not limited to: The Boat Patrol Program, aimed at minimizing the navigation hazards from debris in the waterways; the Trapping Program, which provides alternative access routes and maintains safe ice trails; the Hot Lunch Program, which serves hot lunch to over 1 000 students daily throughout the school year.



**Through the Dock Replacement Program, Manitoba Hydro provides and maintains a network of approximately 70 docks located throughout Cross Lake.**

**Manitoba Hydro's rich legacy of community involvement dates back to the utility's origins. The past year was no exception, with support for community events and causes taking many guises—not just financial but through employee volunteerism as well.**



### **Neighbours Helping Neighbours expands**

In September 2007 the Salvation Army, in partnership with Manitoba Hydro, extended the Neighbours Helping Neighbours program to all residents of Manitoba. Since its creation in 2004, the program has helped over 1 000 low-income families and seniors in crisis situations who need assistance paying their energy bills. Now, with the support of Manitoba Hydro, the Salvation Army provides the benefits to Manitobans across the province. Previously, only residents of Winnipeg and Brandon were able to take part in the energy assistance program.

### **Waterfall of Lights opening ceremonies**

The kick-off for the Power Smart Waterfall of Lights took place in December 2007 at the Riverbank Corridor skating oval in Brandon. The Waterfall of Lights is a community-inspired lighting display and also an interactive recreation area open to all.

**Fireworks illuminate the night sky in downtown Winnipeg to kick-off the annual Santa Claus Parade.**



### New museum exhibit features graceful giants

The Manitoba Electrical Museum & Education Centre's latest exhibit on wind energy was opened in January 2008. Known as Graceful Giants, the display features an operating scale model of a wind turbine and provides information about wind energy in Manitoba.

The largest undertaking at the museum this past year was the development of a portable exhibit—opened in May 2007—at the New Icelandic Heritage Museum in Gimli, Manitoba. The Power Up on Electrical History display presents a snapshot of rural electrification in the province as well as other aspects of electrical development. Among the information in the traveling exhibit, visitors learned about the first uses of electricity in Manitoba and the year Gimli was electrified.

The Manitoba Electrical Museum was established in 2001 and portrays the story of electricity in Manitoba from the 1870s to the present.

### Teddy Bears' Picnic

An estimated 50 000 people attended the annual Teddy Bears' Picnic at Assiniboine Park in Winnipeg this summer with 2 800 visitors showing up at Manitoba Hydro's Play it Safe tent. Over 25 volunteers, mostly employees and their family members, joined in to help share the safety messages.



## Close Encounters of the Wrong Kind

A billboard entitled Close Encounters of the Wrong Kind featuring some of the utility's key farm safety concerns was displayed in 18 rural locations. In addition, safety messages related to working around electricity on the farm were delivered to over 2 600 (grades four to six) students in 11 communities. Also in 2007, a display focusing on Manitoba Hydro farm safety concerns was featured at Brandon's Ag Days and at the Brokenhead River Agricultural Conference in Beausejour.

## Sled safety

Each winter, snowmobilers in Manitoba travel along transmission and distribution line rights-of-way and risk striking the guy wires that support the thousands of wood poles and steel structures located throughout the province. And each year Manitoba Hydro provides extensive snowmobile safety education in an effort to reduce, and hopefully eliminate accidents completely, through magazine ads, newsletters, club trail maps, online snowmobile websites, and television commercials.

## CO awareness

In November 2007 Manitoba Hydro launched an advertising campaign reminding customers of the dangers of Carbon Monoxide (CO) and encouraging them to install CO detectors to protect themselves and their families. Billboards entitled CO: The Silent Killer and a safety spot for television were aired over the winter months.

## School Bus Safety Week

Resources aimed at what to do in an emergency involving downed power lines were provided to schools throughout the province for School Bus Safety Week in October 2007. This fall, over 24 000 student, 4 300 driver brochures and 677 posters were provided to Manitoba schools.

**In April 2007, Manitoba Hydro helped sponsor the World Women's Hockey Championship in Winnipeg and Selkirk.**



Each year Manitoba Hydro provides extensive snowmobile safety education to help reduce accidents.

## **Manitoba Hydro International**

Manitoba Hydro International Ltd. (MHI) provides consulting, training, and management services to utility organizations worldwide, primarily in developing countries. This past year, MHI provided management services to Electricidade de Timor-Leste, the state-run electricity company in East Timor, and technical assistance and operations monitoring expertise for the 2 075 megawatt Cahora Bassa Hydropower and HVDC transmission scheme in Mozambique. The continuance of management services to the Kenya Power and Lighting Company has resulted in significant gains in the electrification of urban depressed areas and remote rural areas.

In addition, MHI provided distribution and metering expertise to eastern Nigeria, and employs advisors on the Artumas gas-to-power project in the economically depressed area of southern Tanzania.

## **Manitoba Hydro Utility Services**

Manitoba Hydro Utility Services (MHUS) celebrated its 10th year of operations in 2008—a milestone for the meter reading subsidiary.

MHUS provides integrated meter reading services for electric and natural gas customers as well as temporary labour to assist the corporation in meeting short-term operational requirements. The subsidiary achieves savings and synergies by reading customers' electricity and natural gas meters simultaneously. Over the year, MHUS staff provided over four million meter readings.

## **Manitoba HVDC Research Centre**

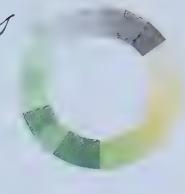
Since its inception, the Manitoba HVDC Research Centre has been recognized globally as a centre of high voltage power system expertise. Throughout the year, clients worldwide contacted the centre to assist them with HVDC expertise.

The centre's new version of its flagship software power system simulation product, PSCAD, was released in May 2007. PSCAD boasts over 30 000 user licenses throughout the world in over 80 countries and remains the industry standard. In addition, PSCAD has quickly become the simulation software of choice for the Canadian wind industry.

During the past year, the centre provided 23 PSCAD training courses to over 330 clients in a dozen countries.

**Manitoba Hydro International's Jack Harder lends his business expertise to a vice-president at the natural gas generation plant in Mtwara, Tanzania.**

*Our subsidiaries*



## **Integrity Program**

Manitoba Hydro encourages employees and others to speak up on matters of concern without fear of reprisal, through its Integrity Program. The Program enables the corporation to identify and investigate serious concerns and take corrective action.

Employees can report any type of wrongdoing specified in The Public Interest Disclosure (Whistleblower Protection) Act, as well as any perceived non-compliance with Manitoba Hydro's Code of Ethics. Employees have a number of options available to them for where to report their concerns in the corporation. Disclosures can also be made through the employee's bargaining unit. Anonymous disclosures are permitted.

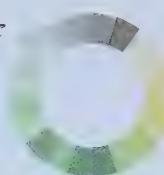
All disclosures under the Integrity Program are protected by strict rules of confidentiality.

Below is a summary of all disclosures received during 2007/08 which alleged wrongdoing as specified in The Public Interest Disclosure (Whistleblower Protection) Act:

Total number of disclosures received:	24
Number of disclosures acted upon:	24
Number of disclosures not acted upon:	0
Number of investigations commenced:	24
Number of disclosures that were verified:	11

### **Corrective action was taken for each verified incident, summarized as follows:**

- Employee resigned for theft of property, salvageable property was recovered.
- Arrangements made to protect worksite from theft, and employee retired.
- Employee resignation following proof of theft.
- Discipline of employee for theft currently pending.
- Modifications to duties made to accommodate disabled employee.
- Contractor employee disciplined by contractor for inappropriate comments.
- Modification of work requirements and other measures to accommodate disabled employee.
- Employee disciplined for harassment.
- Employee disciplined for harassment.
- Employee removed inappropriate screen saver.
- Manager will closely monitor use of overtime.



The Board of Manitoba Hydro models its approach to corporate governance on emerging best practices in Canada, the United States, and Great Britain, as reflected in the advice and recommendations of bodies such as the Manitoba Crown Corporations Council, the Conference Board of Canada, the Corporate Executive Board, and Canadian Security Administrators.

The Board reviews the corporation's Code of Ethics, and ethics and social responsibility are considered in Board decisions. Minutes of Board meetings are public and the corporation's annual report and quarterly financial statements are tabled in the Legislature. The corporation is reviewed by the Crown Corporations Council and by a committee of the Legislature.

The Audit Committee of the Board reviews the corporation's Integrated Financial Forecast and makes recommendations to the Board. The Audit Committee also reviews the integrated risk management plan developed and maintained by the corporation and makes recommendations to the Board. The Audit Committee obtains opinions from external auditors, internal auditors, and management on the quality of internal controls.

The Board and Audit Committee review the corporation's systems for ensuring legal compliance. Conflict of interest policies are in place for members of the Board, officers, and employees. The Board ensures that certifications with respect to the accuracy of financial statements are provided by the CEO and CFO.

The Board sits as the planning committee for the corporation and approves the Corporate Strategic Plan each year. Members of the Board receive orientation materials that are continually updated. The Human Resources Committee of the Board has responsibility for succession planning.





# MANAGEMENT DISCUSSION AND ANALYSIS

The Management Discussion and Analysis (MD&A) reports on the consolidated financial results and operational performance of Manitoba Hydro for the year ended March 31, 2008. The MD&A should be read in conjunction with the consolidated financial statements and notes. The MD&A also provides an assessment of Corporate risks and contains forward-looking statements regarding conditions and events which may affect financial performance in the future. Such forward-looking statements are subject to a number of uncertainties which may cause actual results to differ from those anticipated. To the extent known to management, risks and uncertainties have been quantified within reasonable ranges of materiality.

As a provincially-owned Crown Corporation, Manitoba Hydro's mandate is to provide for the continuance of a supply of energy to meet the needs of Manitoba consumers in the most reliable, economic, and environmentally sustainable manner. In fulfilling its mandate, Manitoba Hydro has established a number of goals with related measures and targets. In addition to a review of financial and operational performance for 2007-08, this MD&A reviews Manitoba Hydro's progress towards achieving the Corporate strategic goals.

## FINANCIAL OVERVIEW

Manitoba Hydro's consolidated net income from electricity and natural gas operations for the fiscal year ended March 31, 2008 rose to \$346 million compared to \$122 million in the previous fiscal year. The increase in consolidated net income was largely attributable to excellent water flow conditions on Manitoba's major river systems which resulted in higher hydraulic generation, higher extraprovincial sales and lower power purchased costs. Also contributing to the improved net income was increased revenues from domestic power sales and lower financing costs than in the previous year.

The consolidated net income of \$346 million for the fiscal year 2008 was comprised of a \$340 million profit in the electricity sector and a \$6 million profit in the natural gas sector. The gas sector profit represented a \$5 million improvement over the previous year which was mainly a result of colder weather during the winter of 2007-08, as well as a 1.2% distribution rate increase implemented on May 1, 2007.

The schedule below summarizes Manitoba Hydro's consolidated financial results for the fiscal year ended March 31, 2008 compared to the previous fiscal year.

### FINANCIAL RESULTS – For the year ended March 31

	Electricity 2008	2007	Natural Gas 2008	2007	Consolidated 2008	2007
<i>Revenues</i>						
Manitoba (net of cost of gas sold)	1 097	1 040	142	129	1 239	1 169
Extraprovincial	625	592	-	-	625	592
	1 722	1 632	142	129	1 864	1 761
<i>Expenses</i>						
	1 382	1 511	136	128	1 518	1 639
Net income	340	121	6	1	346	122
Total assets	11 165	10 325	602	597	11 767	10 922
Total equity	1 795	1 386	27	21	1 822	1 407
<i>Financial Ratios</i>						
Debt:Equity					77:23	80:20
Interest coverage					1.71	1.23
Capital coverage					1.60	1.10

## CONSOLIDATED RESULTS

**Revenues** from consolidated electricity and natural gas operations totaled \$2 250 million in 2007-08 compared to \$2 140 million in the previous fiscal year. After deducting the cost of gas sold, which is a pass-through cost with no mark-up to customers by Manitoba Hydro, revenues amounted to \$1 864 million compared to \$1 761 million in the prior year. The \$103 million or 5.8% increase in revenues is mainly attributable to increased domestic electricity and gas sales as a result of colder weather than the previous year and increased extraprovincial sales due to more favourable water conditions and continuing high demand in export markets.

**Expenses** for electricity and natural gas operations decreased from \$1 639 million in 2006-07 to \$1 518 million in 2007-08. This reduction of \$121 million or 7.4% in expenses was largely due to \$92 million lower power purchased costs as a result of increased hydraulic generation and \$66 million lower financing costs primarily due to the recognition of foreign exchange gains on U.S. denominated long-term debt.

**Net income** from electricity and natural gas operations amounted to \$346 million in 2007-08 compared to \$122 million in the previous year. The consolidated net income and a \$69 million increase to opening retained earnings related to the adoption of the new financial instruments standard, increased retained earnings from \$1 407 million at March 31, 2007 to an all time high of \$1 822 million at March 31, 2008, improving the debt:equity ratio to 77:23 at fiscal year-end. These improvements are depicted in the accompanying charts.

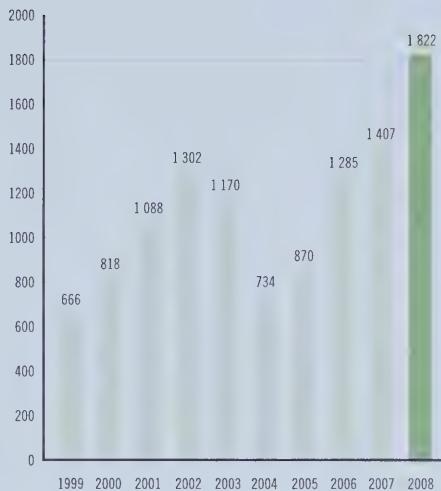
### Financing

Cash provided from operations in 2007-08 was \$630 million, an increase of \$187 million from the previous year. This improvement is mainly due to increased receipts from sales and the reduction in power purchases.

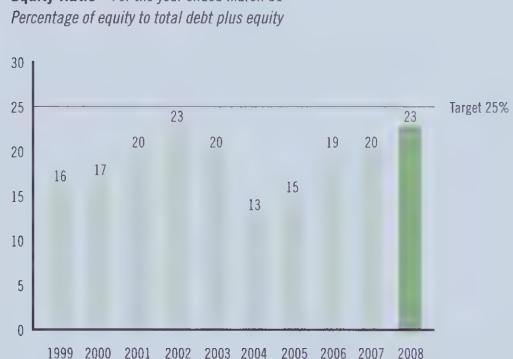
Proceeds from new financing arranged by the Corporation amounted to \$981 million in 2007-08. These proceeds were primarily used to fund new generation capital projects, HydroBond maturities, refinance short term notes and to pre-finance a portion of 2008-09 borrowing requirements.

During 2007-08, the Corporation retired \$311 million of debt comprised of HydroBonds of \$308 million and Manitoba Hydro-Electric Board Bonds of \$3 million.

**Retained Earnings - For the year ended March 31**



**Equity Ratio - For the year ended March 31**



## ELECTRICITY OPERATIONS

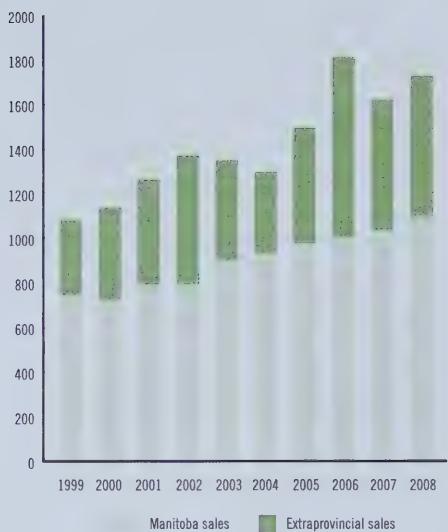
### Electricity Revenues

Total revenues from electricity sales amounted to \$1 722 million, an increase of 5.5% or \$90 million from the previous year. The increase is a result of a \$57 million increase in domestic sales and a \$33 million increase in extraprovincial sales. The increased revenues from electricity sales in Manitoba were primarily due to colder weather in the fourth quarter and a 2.25% rate increase implemented March 1, 2007. The rise in extraprovincial sales was a result of higher sales volumes associated with excellent water flow conditions and increased hydraulic generation.

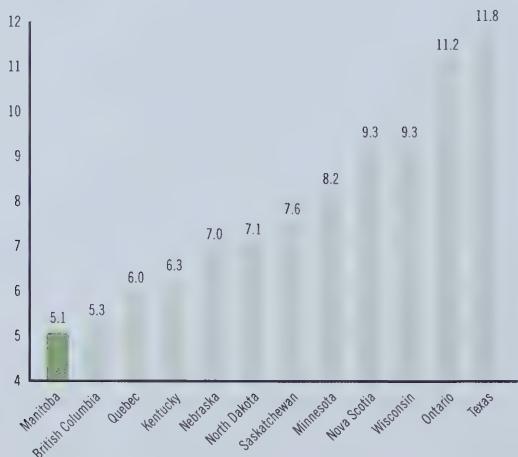
The general rate increase of 2.25% for all customer classes (excluding area and roadway lighting) which was implemented March 1, 2007 contributed approximately \$23 million to the increase in electricity revenues.

Manitoba Hydro continues to offer electricity rates which are among the lowest in North America. This is illustrated in the accompanying chart which was excerpted from utilities' annual reports and United States Department of Energy publications.

**Electricity Revenues - For the year ended March 31, 2008**  
*millions of dollars*



**Canadian Retail Price of Electricity**  
*cents/kWh*



The breakdown of electricity sales by customer segment is as follows:

**ELECTRICITY SALES** - For the year ended March 31

	2008 millions of dollars	2007 millions of dollars	% change	2008 millions of kWh	2007 millions of kWh	% change
<b>Manitoba</b>						
Residential	431	404	6.7	6 838	6 539	4.6
General service	379	363	4.4	6 616	6 471	2.2
Industrial	258	248	4.0	7 607	7 494	1.5
Other revenue	29	25	-	-	-	-
	1 097	1 040	5.5	21 061	20 504	2.7
Extraprovincial	625	592	5.6	11 086	10 100	9.8
	1 722	1 632	5.5	32 147	30 604	5.0

Revenues from electricity sales in Manitoba rose to \$1 097 million from \$1 040 million, an increase of \$57 million or 5.5% from the previous year. Electricity consumption in Manitoba was 21 061 million kilowatt-hours, 557 million kilowatt-hours more than the 20 504 million kilowatt-hours consumed in the 2006-07 fiscal year.

Revenue from sales to residential customers for 2007-08 increased by \$27 million or 6.7% to \$431 million. This increase was primarily due to colder weather experienced in the fourth quarter and a 2.25% rate increase effective March 1, 2007. The number of residential customers increased by 4 607 during the year and totaled 455 430 at March 31, 2008.

Revenue from general service customers amounted to \$379 million in 2007-08, an increase of \$16 million compared to the previous year. The increase was mainly attributable to the March 2007 rate increase and colder weather.

Revenue from large industrial customers increased \$10 million to \$258 million in 2007-08. The change was a result of the March 2007 rate increase and increased consumption by a number of large industrial customers.

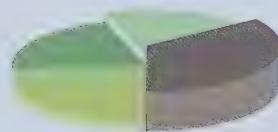
Extraprovincial revenues of \$625 million were \$33 million higher than in 2006-07. The increase reflects higher sales volumes which is due to improved water flow conditions from 2006-07. Of the total extraprovincial revenues, \$515 million or 82% was derived from the U.S. market, while \$110 million or 18% were from sales to Canadian markets.

**Electricity Revenue** - For the year ended March 31, 2008



Extraprovincial	37%
Residential	26%
General service	22%
Industrial	15%

**KWh Consumption** - For the year ended March 31, 2008



Extraprovincial	35%
Industrial	24%
Residential	21%
General Service	20%

## Electricity Expenses

Total expenses from electricity operations amounted to \$1 382 million for 2007-08, a decrease of \$129 million or 8.5% from the previous year. The reduction in expenses was largely due to a \$92 million decrease in fuel and power purchases and a \$66 million decrease in financing costs primarily due to the

recognition of foreign exchange gains on U.S. denominated long-term debt. These decreases were partially offset by an increase in depreciation expense of \$12 million and increased water rental costs of \$12 million associated with increased hydraulic generation.

### ELECTRICITY EXPENSES - For the year ended March 31

	2008	2007	% change
	<i>millions of dollars</i>		
Operating and administrative	335	332	0.9
Finance expense	401	467	(14.1)
Depreciation and amortization	324	312	3.8
Water rentals and assessments	124	112	10.7
Fuel and power purchased	134	226	(40.7)
Capital and other taxes	57	55	3.6
Corporate allocation	7	7	-
	1 382	1 511	(8.5)

Operating and administrative expenses are comprised primarily of labour, material, and overhead costs associated with operating, maintaining, and administering the facilities of the Corporation. In 2007-08, operating and administrative expenses for electric operations amounted to \$335 million, an increase of 0.9% or \$3 million over 2006-07. Increased costs were mainly attributable to escalation for labour, materials and fuel, partially offset by reductions to operating and maintenance costs due to staff vacancies and to reduced costs for general administration.

Finance expense totaled \$401 million in 2007-08, a decrease of \$66 million in comparison to the previous year. The decrease was mainly attributable to the recognition of foreign exchange gains on U.S. denominated long-term debt.

### Electricity Expenses - For the year ended March 31, 2008



Finance expense	29%
Operating and administrative	24%
Depreciation and amortization	24%
Fuel and power purchased	10%
Water rentals and assessments	9%
Capital and other taxes	4%

Depreciation expense amounted to \$324 million in 2007-08 an increase of \$12 million or 3.8% over the previous year. The increase was attributable to new additions to plant and equipment during the year, as well as to the implementation of new depreciation rates effective April 1, 2007.

#### **ELECTRICITY DEPRECIATION AND AMORTIZATION** - For the year ended March 31

	2008	2007	% change
<i>millions of dollars</i>			
Generation	100	90	11.1
Transmission	13	11	18.2
Stations	73	67	9.0
Distribution	73	78	(6.4)
Other	65	66	(1.5)
	324	312	3.8

Water rentals are paid to the Province for the use of water resources in the operation of the Corporation's hydroelectric generating stations. The \$12 million increase in water rentals to \$124 million in 2007-08 reflects higher water flows on Manitoba's major river systems and the resulting increase in hydraulic generation. Hydraulic generation amounted to 34.9 billion kilowatt-hours in 2007-08 compared to 31.6 billion kilowatt-hours in 2006-07.

Fuel and power purchased costs for 2007-08 amounted to \$134 million, a decrease of \$92 million or 40.7%. The reduction in power purchased costs was primarily a result of lower purchases for resale into the export market. Volumes were down mainly due to improved overall water conditions from 2006-07 and increased generation capacity on the Winnipeg River.

#### **Hydraulic Generation** - For the year ended March 31 *billions of kWh*



## Electricity Capital Expenditures

As indicated in the accompanying graph, capital expenditures for ongoing plant and equipment requirements, referred to as base capital, remained relatively flat during 2007-08 compared to the previous fiscal year. Overall, expenditures for capital construction totaled \$797 million in 2007-08 compared to \$616 million during the previous fiscal year. Of the total capital expenditures in 2007-08, \$334 million were for new generation and transmission. Generation capital expenditures of \$330 million included \$149 million related to the Wuskwatim Generating Station and \$77 million related to future Conawapa and Keeyask generation facilities.

Also included in generation capital expenditures was \$31 million for hydraulic generation system upgrades for Kelsey Generating Station and \$73 million for various generation capital projects. New transmission line and transmission upgrade projects amounted to \$77 million, including \$58 million for the Wuskwatim transmission line. Substation additions and upgrades totaled \$67 million. Distribution system additions and modifications to meet the service requirements of customers throughout the province were \$127 million.

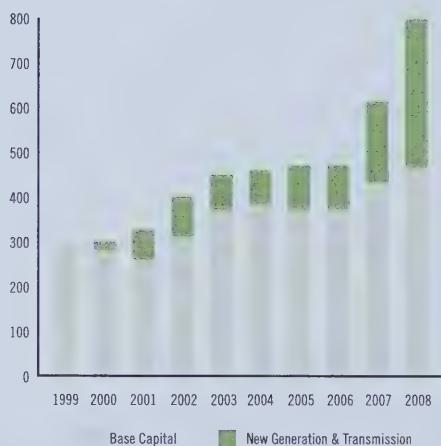
New information technology development and expenditures on communication projects totaled \$61 million. Expenditures for Manitoba Hydro's new downtown head office amounted to \$98 million during the year. The remaining capital expenditures of \$37 million were for replacement of equipment and fleet vehicles.

Electricity Capital Expenditures - For the year ended March 31, 2008



Generation	41%
Transmission and Stations	18%
Distribution	16%
New Head Office	12%
Information Technology and Communication	8%
Other	5%

Electricity Capital Expenditures - For the year ended March 31  
millions of dollars



## NATURAL GAS OPERATIONS

Centra Gas is a wholly-owned subsidiary of Manitoba Hydro. Centra distributes natural gas to 236 498 residential and 24 661 commercial and industrial customers in Manitoba.

**Net income** in the gas sector was \$6 million in 2007-08 compared to a net income of \$1 million in the previous year. The improved financial performance over the previous year was primarily attributable to increased demand due to colder weather and a distribution rate increase implemented on May 1, 2007.

**Revenues** from the sale and distribution of natural gas during 2007-08 were \$528 million, an increase of \$20 million from the previous year. After deducting the cost of gas sold, which is

a pass-through cost with no mark-up by Centra, net revenues amounted to \$142 million, an increase of \$13 million from 2006-07. The increase in net revenue is a reflection of colder weather than the previous year and a 1.2% distribution rate increase implemented on May 1, 2007. Natural gas deliveries were 2 156 million cubic metres in 2007-08 compared to 2 056 million cubic metres in 2006-07.

As directed by the Public Utilities Board, \$2.3 million of revenue from 2007-08 was set aside to develop and implement a program targeted to low-income customers and qualified seniors on fixed incomes to assist in the replacement of low efficiency furnaces with high efficiency furnaces.

### NATURAL GAS REVENUE

For the year ended March 31

### NATURAL GAS DELIVERIES

For the year ended March 31

	2008 <i>millions of dollars</i>	2007 <i>millions of dollars</i>	% change	2008 <i>millions of cubic metres</i>	2007 <i>millions of cubic metres</i>	% change
Residential	293	280	4.6	746	710	5.1
Large general service	168	163	3.1	527	501	5.2
Large commercial & industrial	34	32	6.3	161	149	8.1
Interruptible	26	27	(3.7)	101	104	(2.9)
T-service and other	7	6	16.7	621	592	4.9
	528	508	3.9	2 156	2 056	4.9

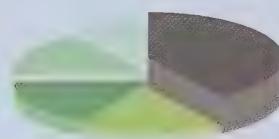
During the 2007-08 fiscal year, natural gas commodity rates passed through to residential customers decreased from 29 cents per cubic metre at the beginning of the year to 28 cents per cubic metre at year end.

In accordance with Centra's quarterly rate-setting methodology, annualized rates for natural gas supplied to residential customers changed during 2007-08 as follows:

- May 1, 2007                          4.5% increase
- August 1, 2007                        1.8% decrease
- November 1, 2007                    3.4% decrease
- February 1, 2008                    1.2% increase

**Expenses** attributable to the natural gas operations, excluding cost of gas sold, amounted to \$136 million in 2007-08, an increase of \$8 million or 6.3% higher than the previous year. The increase was mainly attributable to a \$5 million increase in depreciation and amortization primarily due to changes in depreciation and amortization rates and a \$2 million increase in operating and administrative expenses due to increased requirements for customer service programs.

#### Natural Gas Expenses - For the year ended March 31, 2008



Operating and administrative	41%
Depreciation and amortization	17%
Capital and other taxes	17%
Finance expense	16%
Corporate allocation	9%

#### NATURAL GAS EXPENSES - For the year ended March 31

	2008	2007	% change
<i>millions of dollars</i>			
Operating and administrative	56	54	3.7
Finance expense	22	22	-
Depreciation and amortization	23	18	27.8
Capital and other taxes	23	22	4.5
Corporate allocation	12	12	-
	136	128	6.3

Centra purchased 907 million cubic metres of natural gas based on monthly Alberta indexed pricing and 309 million cubic metres under daily Alberta indexed pricing. Centra also delivered natural gas on behalf of brokers to 45 548 (2007 - 46 273) customers receiving natural gas under Direct Purchase arrangements.

#### Natural Gas Capital Expenditures

Capital expenditures in the natural gas sector were \$28 million in 2007-08 compared to \$29 million in the previous fiscal year. The capital expenditure program reflects the continuing growth in new business, system improvement and other expenditures to meet the needs of the existing customer base.

## SUBSIDIARIES

In addition to Centra Gas, Manitoba Hydro has a number of wholly-owned subsidiaries involved in energy-related business enterprises for purposes of enhancing stakeholder service and value. The most significant operating subsidiaries are:

**Manitoba Hydro Utility Services Ltd. (MHUS)** provides meter reading and related services to Manitoba Hydro and other utilities.

**Manitoba HVDC Research Centre Inc. (HVDC)** provides research and development services and products to the electrical power system industry.

**Manitoba Hydro International Ltd. (MHI)** provides professional consulting, operations, maintenance, and project management services to energy sectors world-wide, either exclusively or through partnerships.

The following table provides a summary of the financial results of the three subsidiary companies for 2007-08:

	MHUS	HVDC	MHI	Total
<i>thousands of dollars</i>				
Revenues	5 072	4 484	10 030	19 586
Expenses	4 914	2 901	8 867	16 682
Net income	158	1 583	1 163	2 904

## WUSKWATIM POWER LIMITED PARTNERSHIP

The **Wuskwatim Power Limited Partnership (WPLP)** was formed to carry on the business of developing, owning, and operating the Wuskwatim Generating Station and related works, excluding the transmission facilities but including all dams, dikes, channels, excavations, and roads. The WPLP has two limited partners, Manitoba Hydro and Taskinigahp Power Corporation (TPC) which is owned beneficially by Nisichawayasihk Cree Nation (NCN) and a General Partner which is a wholly-owned subsidiary of Manitoba Hydro. The Wuskwatim Generating Station is located at Taskinigahp Falls on the Burntwood River about 45 kilometres southwest of Thompson, Manitoba and is being constructed to meet a 2012 in-service date.

## **CORPORATE GOALS**

Manitoba Hydro's Corporate Strategic Plan is built upon its vision "to be the best utility in North America with respect to safety, rates, reliability, customer satisfaction, and environmental leadership, and to always be considerate of the needs of customers, employees, and stakeholders." The Corporation has established the following goals in the pursuit of its Corporate vision:

### **Improve Safety in the Work Environment**

Safety is the Corporation's most important goal. Manitoba Hydro is committed to continuously improving its safety performance and is currently focusing on strategies that will imbed a safety and health culture in all Corporate activities.

### **Provide Customers with Exceptional Value**

Manitoba Hydro provides exceptional value to customers through low rates, a safe and secure system, high reliability and superior service.

### **Be a Leader in Strengthening Working Relationships with Aboriginal Peoples**

Manitoba Hydro is one of the leading utilities in Canada with respect to Aboriginal representation in its workforce. The Corporation continues to place emphasis on building enduring working relationships with Aboriginal peoples through such measures as pre-employment training programs, purchasing and employment preferences, support for Aboriginal businesses, and recognition of cultural requirements in the workplace.

### **Improve Corporate Financial Strength**

Further improving the financial strength of the Corporation will contribute to rate stability and predictability and will protect the Corporation and its customers from a variety of other risks. Considerable progress has been made in recent years and the outlook is favourable.

### **Maximize Export Power Net Revenues**

The ability to sell surplus energy into export markets has contributed significantly to low domestic rates in Manitoba. It is projected that export revenues will continue to be a significant proportion of Corporate revenues.

### **Attract, Develop and Retain a Highly Motivated Workforce that Reflects the Demographics of Manitoba**

In addition to its leading performance in Aboriginal representation in the workforce, the Corporation has made significant progress in achieving employment equity targets for women, persons with disabilities, and visible minorities.

### **Be Proactive in Protecting the Environment**

Through careful management of new and existing facilities and infrastructure, Manitoba Hydro continues to operate in an environmentally appropriate manner. Manitoba Hydro is dedicated to upholding the principles of sustainable development and to protecting the environment from adverse impacts.

### **Be an Outstanding Corporate Citizen**

Manitoba Hydro and its employees continue to take leadership roles in community activities and programs throughout the province.

### **Proactively Support Agencies Responsible for Business Development in Manitoba**

The Corporation works with economic development agencies to maximize wealth and jobs in Manitoba and works with customers to reduce their energy costs and assist them to be competitive.

### **Be a National Leader in Implementing Energy Conservation Programs**

Manitoba Hydro is recognized as a Canadian leader in promoting the wise and efficient use of energy through its Power Smart brand.

## REPORT ON PERFORMANCE

Manitoba Hydro's performance in 2007-08 exceeded its forecasts on a number of fronts. Net income was higher than forecast by \$80 million mainly due to higher revenues from domestic and extraprovincial sales and lower costs for operating, maintenance and administration. System reliability remained high, Aboriginal employment exceeded targets, employee safety continued to improve and all indicators for energy conservation were positive. The following measures are among those utilized by the Corporation in measuring its performance:

	MEASURE	TARGET	PERFORMANCE
Safety in the Work Environment	High-risk accidents	0	9
	Accident severity rate (per 200 000 hours worked)	<16	24.5
	Accident frequency rate (per 200 000 hours worked)	<0.8	1.3
Exceptional Value for Customers	Electricity rates	Lowest in North America	Among the lowest in North America
	Natural gas rates	Among the lowest in Canada	Mid-point in Canada
	Average electric customer outage time (minutes per year)	≤92	112.3
Working Relationships with Aboriginal Peoples	Average electric customer outage frequency (outages per year)	≤1.3	1.2
	CEA Customer Service Index	Best in Canada	Best in Canada
	% Aboriginal employment Corporate	12.5%	13.3%
Finance	% Aboriginal employment Northern	38%	39.8%
	Interest coverage	>1.20	1.71
	Capital coverage	>1.0	1.60
	Debt:Equity (by 2011-12)	75:25	77:23
Maximizing Export Revenues	Net export revenue as a % of total electric revenue 2007-08 (through 2016-17)	25%	29.2%
Diverse Work Force	Women	26%	24.9%
	Persons with disabilities	4.6%	4.5%
	Visible minorities	4.3%	4.5%
Protecting the Environment	Environmental component of CEA Customer Service Index	≥8.5	8.3
	Net greenhouse gas emissions (6% below 1990 levels)	<0.52 megatonnes	0.40 megatonnes
Energy Conservation	Energy saved per year (by 2017-18) Capacity saved (by 2017-18)	2 695 GWh 848 MW	1 415 GWh 492 MW

## RISK MANAGEMENT

Manitoba Hydro faces numerous risks in the fulfillment of its mandate ranging from those commonly associated with any business activity to those less likely events that are catastrophic in nature and which could result in significant societal loss. The Corporation manages all identified risks through a systematic, proactive and integrated process designed to balance the following objectives:

- to identify threats that affect the achievement of the Corporation's mission and mandate;
- to mitigate the consequence of negative occurrences; and
- to take advantage of opportunities which provide benefits to all stakeholders.

All major risks are effectively controlled through risk management activities that include risk identification and assessment, risk monitoring, the establishment of risk tolerances and risk mitigation activities. The risks of each of the Corporation's subsidiaries are also managed within the same corporate risk management framework.

All identified risks are assessed for potential impact using financial, safety, reliability, environmental or customer value criteria. All major risks are quantified within reasonable ranges of materiality and those with a potential financial consequence are summarized in the following table:

RISK	POTENTIAL IMPACT
Infrastructure	Greater than \$2.0 billion for a major facility long term outage
Drought	Greater than \$2.0 billion for a 5 year drought at expected export prices
Loss of export markets	Up to 30% of electric revenues
Interest rates	Up to \$170 million for a 1% change over a forecast period ending 2017-18
Foreign exchange rates	Up to \$100 million for a \$.10 U.S. change over a forecast period ending 2017-18

Manitoba Hydro operates in a capital intensive industry where electricity and natural gas supply are considered necessities by our customers and where normal business risks are dwarfed by the human and financial consequences of any possible prolonged disruption in energy supply. As a result of this service importance, the Corporation manages its infrastructure risks in a manner that makes the likelihood of a prolonged loss of supply as low as possible. The Corporation has an excellent history in this regard and should a service disruption occur, the utility maintains a Corporate Emergency Response Plan to ensure effective and coordinated response to those emergencies or disasters. The Emergency Response Plan also ensures that there is appropriate communication and coordination with other public authorities and emergency measure organizations.

The Corporation is embarking on a major capital expansion program which, subject to obtaining necessary approvals, will add several billions of dollars of investment and related debt to Manitoba Hydro's balance sheet over the next decade. As with all new major generation and transmission projects, there is risk associated with the potential for continued high construction cost escalation, possible labour and technical skill shortages, and uncertain markets into which surplus energy will be sold.

## **ACCOUNTING CHANGES**

Effective April 1, 2007, Manitoba Hydro adopted the Canadian Institute of Chartered Accountants (CICA) new standards for financial instruments. The adoption of the new standards for financial instruments resulted in a \$69 million increase to opening retained earnings and a \$32 million increase to current year net income primarily as a result of the recognition of U.S. foreign exchange gains on U.S. denominated long-term debt. These foreign currency gains reflect a change in the timing and methodology with respect to how U.S. dollar translation gains and losses on long-term monetary assets and liabilities are calculated. Effective April 1, 2007, translation gains and losses are calculated using the specific identification method as compared to previous years that applied the weighted average long-term debt or investment historical exchange rates.

In addition, the adoption of the financial instrument standards resulted in the reclassification of deferred foreign exchange gains and losses on U.S. denominated long-term debt in hedging relationships with future export revenues to "Accumulated Other Comprehensive Income". The deferred foreign exchange balances will remain in this account until future export revenues with which the debt is in a hedging relationship are realized, at which time the corresponding deferred foreign exchange is recognized into income.

Further information on the new standards for financial instruments and the impact upon adoption is disclosed in Note 2 of the consolidated financial statements.

The CICA's Accounting Standards Board has announced that Canadian publicly accountable enterprises will be required to adopt International Financial Reporting Standards (IFRS) effective January 1, 2011. Manitoba Hydro is in the process of assessing the impacts of the conversion to IFRS.

## OUTLOOK

Building on the positive financial performance for 2007-08, the expectation for 2008-09 is that hydraulic generation will be at normal levels and financial results will continue to be favourable. Although precipitation across Manitoba Hydro's watersheds this past winter has been slightly below average, this is offset by well above average energy in reservoir storage as a result of high inflows during the past year. With normal precipitation and continuing high export market prices, 2008-09 will be another profitable year for the Corporation with net income projected to be over \$160 million. With continuing favourable water conditions and annual electricity rate increases close to the rates of inflation, Manitoba Hydro will continue to make good progress towards further improving its financial strength.

Since March of 2007, when Manitoba Hydro released a 300 MW Request for Proposal (RFP) for the purchase of additional wind-generated energy, there has been substantial interest in developing wind power in Manitoba. Manitoba Hydro is currently in discussions with the developer of the most favourable project submitted by St. Joseph Wind Farms Inc. In addition, Manitoba Hydro plans to release a RFP for the development of up to 3 MW of community-based wind energy pilot projects in Manitoba.

In December, 2007, Minnesota Power and Manitoba Hydro signed a Term Sheet which sets out the significant terms for a surplus energy sale beginning in 2008 and a power purchase agreement for 250 MW of power which would commence in about 2020 for a 15 year period. The sale provides Manitoba Hydro with an opportunity to plan construction of hydroelectric generation in northern Manitoba and major new transmission facilities between Canada and the U.S. Detailed contract negotiations are underway.

On March 31, 2008, Manitoba Hydro and Wisconsin Public Service (WPS) signed a Term Sheet that outlined the general terms and conditions for a sale of up to 500 MW of power to WPS from 2018 to 2032. This proposed major agreement with WPS will trigger additional generating and transmission facilities that will add to the capability and reliability of the regional power system. As well, new northern hydroelectric developments will bring direct benefits to local Aboriginal communities. It is anticipated that enhanced revenue from export sales and the retention of transmission access rights will result in long term net savings to all domestic customers.

Manitoba Hydro is continuing with the strategic planning for future generation projects, including the Conawapa and Keeyask hydraulic generating stations on the Nelson River. Negotiations on the Joint Keeyask Development Agreement have continued to progress between Manitoba Hydro and the four First Nations partners: Tataskweyak, War Lake, Fox Lake, and York Factory. It is anticipated that the agreement will be finalized during the 2008-09 fiscal year, setting the stage for future joint commitment to the Keeyask project based on an acceptable business case.

Other significant future generation projects include the rebuilding of the Pointe Du Bois generating station on the Winnipeg River and a new north-south HVDC transmission line. Once complete, the rebuilt Pointe Du Bois generating station will contribute approximately an additional 50 MW to Manitoba Hydro's system. A new north-south HVDC transmission line that runs down the west side of Lakes Winnipegosis and Manitoba will improve system reliability and enhance the flow of power from the northern Nelson River generating stations to the primary southern markets.

Construction of Manitoba Hydro's head office building on Portage Avenue in downtown Winnipeg continued throughout the year. The 22-storey, 690 000 square foot building will be one of the most energy efficient office towers in the world, using approximately 60% less energy than the Model National Energy Code for Buildings. Occupancy is scheduled for fall 2008.

Manitoba Hydro's Power Smart initiative continues to grow with over thirty programs offered to residential, commercial and industrial customers in 2007-08. This highly successful initiative continues to encourage all customer sectors to use energy more efficiently in Manitoba. These efforts work towards making permanent shifts in the marketplace for long-term adoption of energy efficiency technologies and practices. The Power Smart initiative is expected to achieve electric energy savings of 2 695 GWh/year and natural gas savings of 101 million cubic metres by 2017-18. The overall Power Smart initiative is expected to reduce greenhouse gas emissions by over 2.0 million tonnes annually while providing Manitobans with lower energy bills from the installation of energy savings measures and the sale of conserved energy on the export market.

# MANAGEMENT REPORT

## MANAGEMENT REPORT

For the year ended March 31

The accompanying consolidated financial statements and all additional information contained in the Annual Report are the responsibility of management and have been approved by the Manitoba Hydro-Electric Board. The financial statements have been prepared by management in accordance with accounting principles generally accepted in Canada, applied on a basis consistent with that of the preceding year. In management's opinion, the consolidated financial statements have been properly prepared within reasonable limits of materiality, incorporating management's best judgment regarding all necessary estimates and all other data available up to June 5, 2008. The financial information presented elsewhere in the Annual Report is consistent with that in the consolidated financial statements.

Management maintains internal controls to provide reasonable assurance that the assets of the Corporation are properly safeguarded and that the financial information is reliable, timely, and accurate. An internal audit function independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its finding to management and to the Audit Committee of the Board.

The responsibility of the external auditors, Ernst & Young LLP, is to express an independent, professional opinion on whether the consolidated financial statements are fairly presented in accordance with Canadian generally accepted accounting principles. The Auditors' Report outlines the scope of their examination and their opinion.

The Audit Committee of the Board is comprised of five members, the majority of whom are members of the Manitoba Hydro-Electric Board. The Audit Committee of the Board meets with the external auditors, representatives of the Auditor General's Office, the internal auditors and management to satisfy itself that each group has properly discharged its respective responsibility and to review the consolidated financial statements before recommending approval by the Board. The internal and external auditors have full and unrestricted access to the Audit Committee, with or without the presence of management. The Board reviews the Annual Report in advance of its release and approves its content and authorizes its publication.

On behalf of management:



R. B. Brennan, FCA  
President and Chief Executive Officer



V. A. Warden, CMA, FCMA  
Vice-President,  
Finance and Administration and Chief Financial Officer

Winnipeg, Canada  
June 5, 2008

# AUDITORS' REPORT

## TO THE BOARD OF DIRECTORS OF MANITOBA HYDRO-ELECTRIC BOARD

We have audited the consolidated balance sheet of Manitoba Hydro-Electric Board as at March 31, 2008 and the consolidated statements of income, comprehensive income, accumulated other comprehensive income, retained earnings and cash flows for the year then ended. These consolidated financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 2008 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

*Ernst & Young LLP*

Chartered Accountants

86      Winnipeg, Canada

87      May 30, 2008

# CONSOLIDATED FINANCIAL STATEMENTS

## CONSOLIDATED STATEMENT OF INCOME

*For the year ended March 31*

		Notes	2008	2007
			<i>millions of dollars</i>	
<b>Revenues</b>				
Electric	Manitoba		1 098	1 040
	Extraprovincial	3	625	592
Gas	Commodity		386	379
	Distribution		141	129
			2 250	2 140
Cost of gas sold			386	379
			1 864	1 761
<b>Expenses</b>				
Operating and administrative			391	386
Finance expense		4	440	506
Depreciation and amortization			349	332
Water rentals and assessments		5	124	112
Fuel and power purchased			134	226
Capital and other taxes			80	77
			1 518	1 639
<b>Net Income</b>			346	122

## CONSOLIDATED STATEMENT OF RETAINED EARNINGS

*For the year ended March 31*

		2008	2007
		<i>millions of dollars</i>	
<b>Retained earnings, beginning of year</b>			
Retained earnings, beginning of year		1 407	1 285
Adjustments for the adoption of new accounting policies		2	-
Net income		69	122
<b>Retained Earnings, end of year</b>		346	1 407

The accompanying notes are an integral part of the consolidated financial statements.

## CONSOLIDATED BALANCE SHEET

As at March 31

	Notes	2008	2007
		<i>millions of dollars</i>	
<b>Assets</b>			
<b>Property, Plant and Equipment</b>			
In service	6	11 861	11 424
Less accumulated depreciation	6	4 187	3 924
		7 674	7 500
Construction in progress	6	1 238	878
		8 912	8 378
<b>Current Assets</b>			
Cash and cash equivalents		133	1
Accounts receivable and accrued revenue		465	426
Interest receivable		10	10
Materials and supplies, at average cost		101	117
		709	554
<b>Other Assets</b>			
Sinking fund investments	7	700	630
Pension assets	8	781	800
Deferred charges	9	557	452
Goodwill		108	108
		2 146	1 990
		11 767	10 922

Approved on behalf of the Board:

Victor H. Schroeder, QC  
Chair of the Board

William Fraser, FCA  
Chair of the Audit Committee

	Notes	2008	2007		
		<i>millions of dollars</i>			
<b>Liabilities and Equity</b>					
<b>Long-Term Debt</b>					
Long-term debt net of sinking fund investments		6 517	6 192		
Sinking fund investments shown as assets	7	700	630		
	10	7 217	6 822		
<b>Current Liabilities</b>					
Accounts payable and accrued liabilities	11	337	305		
Notes payable	12	-	148		
Accrued interest		106	138		
Current portion of long-term debt	10	353	405		
		796	996		
<b>Other Liabilities</b>					
Deferred liabilities and credits	13	388	508		
Pension obligation	8	714	663		
Asset purchase obligation	14	225	228		
		1 327	1 399		
<b>Contributions in Aid of Construction</b>		300	298		
<b>Equity</b>					
Retained earnings		1 822	1 407		
Accumulated other comprehensive income		305	-		
		2 127	1 407		
		11 767	10 922		

The accompanying notes are an integral part of the consolidated financial statements.

## CONSOLIDATED STATEMENT OF CASH FLOWS

*For the year ended March 31*

	Notes	2008	2007
		<i>millions of dollars</i>	
<b>Operating Activities</b>			
Cash receipts from customers	2 208	2 069	
Cash paid to suppliers and employees	(1 051)	(1 095)	
Interest paid	(560)	(563)	
Interest received	33	32	
	630	443	
<b>Financing Activities</b>			
Proceeds from long-term debt	981	172	
Retirement of long-term debt	(311)	(79)	
Notes payable	(148)	148	
Other	(35)	(14)	
	487	227	
<b>Investing Activities</b>			
Property, plant and equipment, net of contributions	(827)	(645)	
Sinking fund payment	(96)	(100)	
Other	(62)	(43)	
	(985)	(788)	
<b>Net increase (decrease) in cash</b>	<b>132</b>	<b>(118)</b>	
Cash at beginning of year	1	119	
<b>Cash at end of year</b>	<b>133</b>	<b>1</b>	

The accompanying notes are an integral part of the consolidated financial statements.

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

*For the year ended March 31*

	2008	2007
	<i>millions of dollars</i>	
<b>Net Income</b>	346	122
 <b>Other Comprehensive Income</b>		
Unrealized foreign exchange gains on debt in cash flow hedges	229	-
Realized foreign exchange gains on debt in cash flow hedges	(52)	-
recognized in net income in the current year		
Unrealized fair value gains on available-for-sale	20	-
U.S. sinking fund investments		
	197	-
 <b>Comprehensive Income</b>	543	122

## CONSOLIDATED STATEMENT OF ACCUMULATED OTHER COMPREHENSIVE INCOME

*For the year ended March 31*

	Notes	2008	2007
		<i>millions of dollars</i>	
<b>Balance, beginning of year</b>		-	-
Adjustments for the adoption of new accounting policies	2	108	-
Other comprehensive income		197	-
 <b>Balance, end of year</b>		305	-

The accompanying notes are an integral part of the consolidated financial statements.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## FOR THE YEAR ENDED MARCH 31, 2008

### NOTE 1 SIGNIFICANT ACCOUNTING POLICIES

**Consolidation** - The consolidated financial statements include the financial statements of the Corporation and its subsidiaries. For purposes of consolidation, all significant intercompany accounts and transactions have been eliminated.

**Rate Regulated Accounting** - The prices charged for the sale of electricity and natural gas within Manitoba are subject to review and approval by the Public Utilities Board of Manitoba (PUB). The rate-setting process is designed such that rates charged to electricity and natural gas customers recover costs incurred by Manitoba Hydro in providing electricity and gas service. Accordingly, Manitoba Hydro applies various accounting policies that differ from enterprises that do not operate in a rate-regulated environment. Such accounting policies allow for the deferral of certain costs or credits which will be recovered or refunded in future rates. These costs or credits would otherwise be included in the determination of net income in the year that the cost or credit is incurred. Manitoba Hydro refers to such deferred costs or credits as regulated assets or liabilities which are generally comprised of the following:

- Deferred taxes - Taxes paid by Centra Gas (July 1999) as a result of its change to non-taxable status on acquisition by Manitoba Hydro, have been deferred and are being amortized on a straight-line basis over a period of 30 years.
- Acquisition costs - Costs associated with the acquisition of Centra Gas (July 1999) and Winnipeg Hydro (September 2002) have been deferred and are being amortized on a straight-line basis over a period of 30 years.
- Site restoration costs - Site restoration costs incurred are recorded as a deferred expense and are amortized on a straight-line basis over 15 years.
- Purchased gas variance accounts (PGVA) - Accounts are maintained to recover/ refund differences between the actual cost of gas and the cost of gas incorporated into rates charged to customers as approved by the PUB. The difference between the recorded cost of natural gas and the actual cost of natural gas is carried as an account receivable/ payable, and recovered or refunded in future rates.
- Gas Power Smart programs - The costs of the Corporation's energy conservation programs for its natural gas operations are deferred and amortized on a straight-line basis over a period of 5 years.

Manitoba Hydro's other significant accounting policies are as follows:

a) **Property, Plant and Equipment**

Property, plant and equipment is stated at cost which includes direct labour, materials, contracted services, a proportionate share of overhead costs and interest applied at the average cost of debt. Finance expense is allocated to construction until a capital project becomes operational or a decision is made to abandon, cancel or indefinitely defer construction. Once the transfer to in-service property, plant and equipment is made, finance expense allocated to construction ceases, and depreciation and finance expense charged to operations commences.

b) **Depreciation**

Depreciation is provided on a straight-line remaining life basis. The major components of generating stations are depreciated over the lesser of the remaining life of the major component or the remaining life of the associated generating station.

The range of estimated service lives of each major asset category is as follows:

Generation	- Hydraulic	45 - 100 years
	- Thermal	25 - 65 years
Transmission	- Lines	40 - 85 years
	- Stations	20 - 57 years
Distribution		15 - 65 years

Provision for removal costs of major property, plant and equipment is charged to depreciation expense on a straight-line basis over the remaining service lives of the related assets. Retirements of these assets, including costs of removal, are charged to accumulated depreciation with no gains or losses reflected in operations. The estimated service lives and removal costs of the assets are based upon depreciation studies conducted periodically by the Corporation.

c) **Asset Retirement Obligations**

Asset retirement obligations are measured initially at fair value in the period in which the obligations are incurred, provided that a reasonable estimate of the fair value can be made. The present value of the retirement cost is added to the carrying amount of the related asset. In subsequent periods, the retirement cost is amortized over the useful life of the asset and the carrying value of the liability is increased to recognize increases in the liability's present value with the passage of time.

d) **Contributions in Aid of Construction**

Contributions are required from customers whenever the costs of extending service exceed specified construction allowances. Contributions are amortized on a straight-line basis over the estimated service lives of the related assets.

e) **Planning Studies**

The costs of planning studies related to uncommitted major generation or transmission facilities are deferred and amortized on a straight-line basis over 15 years. If there is reasonable assurance that a project will proceed to construction, any unamortized balance related to that project is transferred to construction in progress.

f) **Electric Power Smart programs**

The costs of the Corporation's electric energy conservation programs, referred to as Power Smart, are deferred and amortized on a straight-line basis over a period of 15 years.

g) **Revenues**

Customers' meters are read and billed on a cyclical basis. Revenues are accrued in respect of energy delivered for those cycles not yet billed.

h) **Cost of Gas Sold**

Cost of natural gas sold is recorded at the same rates charged to customers.

i) **Employee Future Benefits**

Manitoba Hydro provides employee future benefits, including pension and other post-retirement benefits, to both existing and retired employees. Pension plans include the Civil Service Superannuation Board (CSSB) plan, three Centra Gas curtailed pension plans, and The Winnipeg Civic Employees' Benefits Board Program (EBBP).

The costs and obligations of pension and other post-retirement benefits are calculated by an independent actuary using the accrued benefit actuarial cost method and reflect management's best estimate of future compensation increases, service lives and inflation rates. Pension expense is comprised of the cost of pension benefits provided during the year, the amortization of past service benefits, experience gains and losses, and expected returns on fund assets net of interest on the obligation. Expected returns on fund assets are calculated using market related values based on a five year moving average. The unamortized present value of past service benefits and actuarially determined experience gains or losses are recognized in the financial statements as deferred assets or credits.

The Corporation utilizes the "corridor method" of amortizing actuarial gains and losses. The amortization of experience gains and losses is recognized only to the extent that the cumulative unamortized net actuarial gain or loss exceeds 10% of the greater of the accrued benefit obligation and the fair market value of plan assets at the beginning of the year. When required, the excess of the cumulative gain or loss balance is amortized over the expected average remaining service life of the employees covered by the plan.

Pension and long-term disability expenses pertaining to the former Winnipeg Hydro employees are recognized at the time contributions are made to the EBBP which maintains the funds and obligations relating to these employees in its financial records.

Other employee benefits earned by employees include vacation, vested sick leave, severance and a retirement health spending plan. Where applicable, the future costs of these benefits are based on management's best estimates.

j) **Comprehensive Income**

Comprehensive income consists of net income and other comprehensive income (OCI). OCI includes unrealized gains and losses arising from changes in the fair value of available-for-sale assets and changes in the foreign exchange rate for U.S. denominated long-term debt in effective cash flow hedging relationships. Such amounts are recorded in accumulated OCI (AOCI) until the criteria for recognition in net income are met.

k) **Financial Instruments**

All financial instruments are measured at fair value on initial recognition as of the trade date. Transaction costs are included in the initial carrying amount of financial instruments. Measurement in subsequent periods depends on the classification of the instrument. Financial instruments are classified into one of the following five categories: held-to-maturity investments, loans and receivables, held-for-trading, available-for-sale, or other financial liabilities.

Financial instruments classified as loans and receivables, held-to-maturity investments and other financial liabilities are measured at amortized cost using the effective interest method of amortization. Available-for-sale financial assets are measured at fair value with revaluation gains and losses recorded in OCI until the instrument is derecognized or impaired. Held-for-trading financial instruments are measured at fair value and all gains and losses are included in income in the period in which they arise.

The Corporation has classified its financial instruments as follows:

Held-for-Trading	Loans and Receivables	Available-for-Sale	Other Financial Liabilities
Cash and cash equivalents	Accounts receivable and accrued revenue	Sinking fund investments	Long-term debt (including current portion)
U.S. forward exchange contracts	Interest receivable		Accounts payable and accrued liabilities
			Notes payable
			Accrued interest
			Asset purchase obligation

**i) Foreign Currency Translation**

Revenues and expenditures resulting from transactions in foreign currencies are translated into Canadian dollar equivalents at exchange rates in effect at the transaction dates.

Long-term monetary assets and liabilities denominated in U.S. currencies are translated into Canadian currency at the exchange rate prevailing at the balance sheet date. Translation gains and losses are credited or charged to finance expense in the current period except for long-term debt obligations in hedging relationships with future export revenues. Translation gains and losses for long-term debt obligations in hedging relationships with future export revenues are recorded in OCI until such time that the hedged export revenues are realized, at which time the corresponding exchange gains and losses are credited or charged to finance expense.

Current monetary assets and liabilities denominated in foreign currencies are translated into Canadian currency at the exchange rate prevailing at the balance sheet date. Any exchange gains and losses on the translation of current monetary assets and liabilities are credited or charged to finance expense in the current period.

**m) Derivatives**

The Corporation does not engage in derivative trading or speculative activities. All derivative instruments are carried at fair value on the consolidated balance sheet with the exception of those that were entered into for the purpose of physical receipt or delivery in accordance with the Corporation's expected normal purchases and sales. Changes in the fair value of derivatives that are not designated in a hedging relationship and do not qualify for the normal purchase and sale exemption are recorded in net income.

**n) Hedges**

The Corporation has designated cash flow and fair value hedges linking financial instruments to specific assets and forecasted transactions. The Corporation documents the relationship between the hedging instrument and the hedged item and assesses at inception, and on an ongoing basis, the effectiveness of the hedging relationship.

**o) Debt Discounts and Premiums**

Debt discount and premiums are amortized to finance expense using the effective interest method.

**p) Cash and Cash Equivalents**

Cash and cash equivalents include cash on hand and short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

**q) Goodwill**

Goodwill represents the amount of the Corporation's investments in Centra Gas and Winnipeg Hydro over and above the fair market value of the net assets acquired. The goodwill balance is evaluated annually to determine whether any impairment has occurred. An impairment would be recognized if it was determined that the carrying value of the Corporation's investments in Centra Gas or Winnipeg Hydro exceeded the present value of the future cash flows from these investments. Should impairment occur, it would be recorded as a charge against operations in the year of impairment.

**r) Use of Estimates**

The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates and assumptions that affect amounts reported in the financial statements. Actual amounts could differ from those estimates, but differences are not expected to be material.

## **NOTE 2 ACCOUNTING CHANGES**

### **Accounting Changes**

Effective April 1, 2007, Manitoba Hydro adopted the recommendations of the Canadian Institute of Chartered Accountants (CICA) Section 1506, *Accounting Changes*. This section establishes standards and new disclosure requirements for the reporting of changes in accounting policies and estimates and the reporting of error corrections. The adoption of this standard had no impact on the financial statements of Manitoba Hydro.

### **Financial Instruments**

Effective April 1, 2007, Manitoba Hydro adopted the recommendations of the CICA Section 1530, *Comprehensive Income*; Section 3855, *Financial Instruments - Recognition and Measurement*; Section 3861, *Financial Instruments - Disclosure and Presentation*; and Section 3865, *Hedges*. In accordance with the transitional provisions of these new sections, Manitoba Hydro adopted the standards retroactively with an adjustment to opening retained earnings and AOCI. Comparative amounts for prior periods have not been restated.

### **Comprehensive Income**

Section 1530, *Comprehensive Income*, consists of net income and OCI. Manitoba Hydro now presents separately consolidated statements of comprehensive income and AOCI.

### **Financial Instruments – Recognition and Measurement**

Section 3855, *Financial Instruments*, establishes the recognition and measurement criteria for financial assets, financial liabilities and derivatives. Initially, all financial instruments are measured at fair value. Measurement in subsequent periods depends on the classification of the instrument.

Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial instrument. With the adoption of Section 3855, Manitoba Hydro reclassified transaction costs to the carrying value of the long-term debt issues to which they pertain. The change to the effective interest method of amortization was retroactively applied to opening retained earnings for transaction costs as well as debt and investment discounts and premiums. Previously, these costs were recognized separately and amortized on a straight-line basis over the life of the respective debt or investment.

U.S. sinking fund investments are classified as available-for-sale financial instruments. Changes in the fair value of U.S. sinking fund investments due to changes in market interest rates are recorded in OCI until such time that the U.S. sinking fund investment matures or is derecognized; at which time the corresponding balances in AOCI are recognized in net income. Previously, fair value changes for fluctuations in market interest rates were note disclosed only.

### **Hedges**

Section 3865, *Hedges*, specifies the accounting for and criteria that must be satisfied for hedge accounting to be applied to fair value and cash flow hedges.

The Corporation has cash flow hedging relationships between U.S. long-term debt balances and future U.S. export revenues. Accordingly, foreign exchange translation gains and losses on U.S. long-term debt balances in effective cash flow hedge relationships are recognized in OCI until future hedged U.S. export revenues are realized, at which time the respective AOCI balances are also recognized in net income. An opening balance sheet adjustment was made to transfer previously unrealized deferred U.S. foreign exchange gains on long-term debt in an effective cash flow hedge with future U.S. export revenues to AOCI.

Manitoba Hydro has fair value hedging relationships between U.S. long-term debt balances and U.S. sinking fund investments. Offsetting foreign exchange translation gains and losses on these items are recognized in net income.

## **Impact Upon Adoption**

The adoption of the new standards resulted in a \$69 million increase to the April 1, 2007 retained earnings and a \$108 million adjustment to AOCI due to the following:

	Opening Retained Earnings	Opening AOCI
	<i>millions of dollars</i>	
Opening foreign exchange gains on financial instruments in effective hedging relationships	61	-
Change from the straight line method to the effective interest method for amortization of transaction costs and discounts and premiums	8	-
Opening unrealized foreign exchange gains on U.S. long-term debt issues in effective hedging relationships with future U.S. export revenues	-	92
Unrealized fair value gains on available-for-sale U.S. sinking fund investments	-	16
<b>Transition Adjustments</b>	<b>69</b>	<b>108</b>

The adoption of the new standards has increased net income in 2007-08 by \$32 million primarily as a result of a reduction in finance charges pertaining to the recognition of foreign exchange gains on U.S. denominated long-term debt.

## **Future Accounting Changes**

### **Financial Instruments - Disclosure and Presentation**

Effective April 1, 2008, the Corporation will adopt CICA Sections 3862, *Financial Instruments – Disclosures* and 3863, *Financial Instruments – Presentation*. These sections replace CICA Section 3861, *Financial Instruments – Disclosure and Presentation* and require disclosure of both qualitative and quantitative information that enables users of financial statements to evaluate the nature and extent of risks from financial instruments to which the Corporation is exposed.

### **Capital Disclosures**

Effective April 1, 2008, the Corporation will adopt CICA Section 1535, *Capital Disclosures*. The section establishes standards for disclosing information that enables users of financial statements to evaluate how an entity manages its capital structure (i.e., debt, equity) and its objectives, policy and processes for managing capital.

### **Inventories**

Effective April 1, 2008, the Corporation will adopt CICA Section 3031, *Inventories*. This section converges Canadian standards with International Financial Reporting Standards (IFRS). It requires inventories to be measured at the lower of cost or net realizable value; disallows the use of a last-in first-out inventory costing methodology; and, under certain circumstances, allows previous write-downs to be reversed.

### **Goodwill and Intangible Assets**

Effective April 1, 2009, the Corporation will adopt the new CICA Section 3064 - *Goodwill and Intangible Assets* which converges Canadian GAAP for goodwill and intangible assets with IFRS. The new standard provides more comprehensive guidance on intangible assets, particularly for internally developed intangible assets.

The impact of these new standards on Manitoba Hydro's financial statements is currently being assessed.

### **International Financial Reporting Standards**

The CICA's Accounting Standards Board (AcSB) announced that Canadian publicly accountable enterprises will adopt IFRS as issued by the International Accounting Standards Board (IASB) effective January 1, 2011. The transition date for Manitoba Hydro of April 1, 2011 will require the restatement, for comparative purposes, of amounts reported by the Corporation for its year ended March 31, 2011. Although IFRS uses a conceptual framework similar to Canadian GAAP, there are differences in accounting standards and Manitoba Hydro is currently assessing the impact of those differences.

### NOTE 3 EXTRAPROVINCIAL REVENUES

	2008	2007
	<i>millions of dollars</i>	
United States	515	507
Canada	110	85
	<b>625</b>	<b>592</b>

U.S. extraprovincial revenues were translated at exchange rates in effect at the date of the transaction. The average effective exchange rate for the year was \$1.00 U.S. = \$1.03 Canadian (2007 - \$1.00 U.S. = \$1.13 Canadian).

### NOTE 4 FINANCE EXPENSE

	2008	2007
	<i>millions of dollars</i>	
Interest on debt	517	575
Interest allocated to construction	(44)	(37)
Investment income	(33)	(32)
	<b>440</b>	<b>506</b>

Included in interest on debt is \$73 million (2007 - \$71 million) related to the Provincial Debt Guarantee Fee. The fee during the year was 1.0% of the total outstanding debt guaranteed by the Province (2007 – 1.0%).

Investment income includes interest earned on sinking fund investments.

### NOTE 5 WATER RENTALS AND ASSESSMENTS

	2008	2007
	<i>millions of dollars</i>	
Water rentals	117	105
Assessments	7	7
	<b>124</b>	<b>112</b>

Water rentals are paid to the Province for the use of water resources in the operation of the Corporation's hydroelectric generating stations. Water rental rates during the year were \$3.34 per MWh (2007 - \$3.34 per MWh).

## NOTE 6 PROPERTY, PLANT AND EQUIPMENT

	2008		2007		
	In service	Accumulated depreciation	Construction in progress	In service	Accumulated depreciation
Generation					
- Hydraulic	4 523	1 413	793	4 391	1 346
- Thermal	509	242	6	504	226
Transmission	.				
- Lines	799	251	88	781	237
- Stations	2 268	969	68	2 174	900
Distribution	2 680	932	42	2 534	850
Other	1 082	380	241	1 040	365
	11 861	4 187	1 238	11 424	3 924

## NOTE 7 SINKING FUND INVESTMENTS

Manitoba Hydro is legislated under the Manitoba Hydro Act to make annual sinking fund contributions to the Province of Manitoba of not less than 1% of the principal amount of the outstanding debt on the preceding March 31, and 4% of the balance in the sinking fund at such date. Contributions to the sinking fund during the year were \$96 million (2007 - \$100 million).

Sinking funds are invested in government bonds and the bonds of highly rated corporations and financial institutions.

	2008		2007	
	millions of dollars			
U.S. investments		700	630	
		700	630	

U.S. investments have a weighted average term to maturity of 2.1 years (2007 - 3.8 years) and an effective yield to maturity of 4.9% (2007 - 4.3%). U.S. investments are translated into Canadian currency at the exchange rate prevailing at the balance sheet date, \$1.00 U.S. = \$1.03 Canadian (2007 - \$1.00 U.S. = \$1.15 Canadian). The carrying value includes \$36 million (2007 - nil) of unrealized fair value gains.

## NOTE 8 PENSION ASSETS AND OBLIGATION

Manitoba Hydro employees are eligible for pensions under the Civil Service Superannuation Board (CSSB) defined benefit plan that provides pension benefits based on years of service and on the average earnings of the 5 best years. The CSSB plan requires the Corporation to contribute approximately 50% of the pension disbursements made to retired employees. In addition, the former employees of Centra Gas are entitled to pension benefits earned under the Centra Gas curtailed pension plans. The former Winnipeg Hydro employees continue to earn benefits under the City of Winnipeg Civic Employees' Benefit Board Program (the EBBP) in which, upon the acquisition of Winnipeg Hydro, Manitoba Hydro became a participating employer. The EBBP is also a defined benefit plan that provides pension benefits based on years of service and on the average earnings of the 5 best years.

The Corporation fully funds its pension obligation to employees. The CSSB manages the Corporation's pension fund (MH Pension Fund) on behalf of the Corporation. The assets related to the Centra Gas curtailed pension plans are held in trust by State Street Trust Co. of Canada and are not reflected on Manitoba Hydro's balance sheet.

The following tables present information concerning the MH Pension Fund and the Centra Gas curtailed pension plans:

	MH Pension Fund		Centra Gas curtailed pension plans	
	2008	2007	2008	2007
<i>millions of dollars</i>				
<b>Plan Assets at Fair Value</b>				
Balance at beginning of year	800	719	75	68
Return (loss) on plan assets	(5)	81	(1)	7
Employer contributions	-	-	3	4
Benefit payments and refunds	(14)	-	(5)	(4)
	781	800	72	75
<b>Accrued Benefit Obligation</b>				
Balance at beginning of year	663	606	78	73
Interest on obligation	43	41	5	5
Current service cost	19	19	-	-
Benefit payments and refunds	(30)	(27)	(5)	(4)
Actuarial losses	19	24	3	4
	714	663	81	78
<b>Surplus (deficit) at end of year</b>	67	137	(9)	(3)

Pension assets are valued at market rates and are invested as follows:

	MH Pension Fund Fair Value		Centra Gas curtailed pension plans Fair Value	
	2008	2007	2008	2007
<i>millions of dollars</i>				
Equities	436	470	44	47
Bonds and debentures	247	243	24	25
Real estate	84	74	3	2
Short-term investments	14	13	1	1
	781	800	72	75

The return on pension fund assets for the MH Pension Fund was negative 0.6% (2007 – positive 11.4%). The return for the Centra Gas curtailed plan fund assets was negative 1.7% (2007 – positive 10.8%).

The weighted average term to maturity on fixed income investments is 8.2 years (2007 – 8.5 years).

The most recent actuarial valuations for the Corporation's obligations under the CSSB and Centra Gas curtailed pension plans were performed with respect to the liabilities outstanding as at December 31, 2007. These valuations incorporated management's best estimate assumptions and took into consideration the long-term nature of the pension plans. The next actuarial valuations for all plans will occur in December 2008.

The Centra Gas curtailed pension plans are also subject to a solvency valuation for funding purposes with the latest valuation taking place as at December 31, 2007.

The significant actuarial assumptions adopted in measuring the Corporation's pension and other employee benefit obligations are as follows:

	2008	2007
Discount rate	6.50%	6.50%
Expected long-term rate of return on plan assets	7.5%	7.5%
Rate of compensation increase, including merit and promotions	1.5 - 2.0%	1.5 - 2.0%
Expected average remaining service life of employees	14 years	14 years
Long-term inflation rate	2.5%	2.0%

The Corporation's pension expense related to each of the pension benefit plans is as follows:

	CSSB plan		Centra Gas curtailed pension plans	
	2008	2007	2008	2007
	<i>millions of dollars</i>			
Current service cost	19	19	-	-
Administrative fees	2	2	-	-
Canada Pension Plan	12	11	-	-
Interest on obligation	43	41	5	5
Expected return on plan assets	(50)	(49)	(5)	(5)
Amortization of net experience loss	3	3	1	1
Amortization of transitional gain	(1)	(1)	-	-
	28	26	1	1

Pension expense for the former Winnipeg Hydro employees is equal to employer contributions to the EBBP in addition to employer remittances to the Canada Pension Plan. Total contributions to the EBBP during the year amounted to \$0.2 million (2007 - \$0.4 million) and reflect an employer contribution rate approximating 1.4% of pensionable earnings to July 1, 2007 and 0.6% of pensionable earnings thereafter.

## NOTE 9 DEFERRED CHARGES

	2008	2007
	<i>millions of dollars</i>	
Power Smart programs - electric	149	123
Employee future benefits	103	31
Contract receivables	69	60
Affordable Energy Fund (Note 18)	34	34
Advances to TPC (Note 19)	25	14
Planning studies	25	28
Premium on purchase of sinking fund investments	18	34
Regulated assets:		
Site restoration costs	42	38
Deferred taxes	38	40
Acquisition costs	24	26
Power Smart programs - gas	19	11
Other	11	13
	557	452

If the Corporation were not subject to rate regulation, the costs associated with the regulated assets would be charged to operations in the period that they were incurred and net income for 2008 would have been reduced by \$8 million (2007 - \$13 million).

In total, deferred charges of \$37 million (2007 - \$37 million) were amortized to operations during the period.

## NOTE 10 LONG-TERM DEBT

During the current year, the Corporation arranged long-term financing in the amount of \$981 million (2007 - \$173 million) of which Provincial advances were arranged for \$548 million with fixed coupon rates between 4.6% and 4.7%, and \$252 million with floating rates. Manitoba HydroBonds were issued for \$134 million with a weighted average yield of 4.7%. Manitoba Hydro-Electric Board Bonds were issued for \$47 million with a fixed coupon rate of 5.75%.

	2008	2007
	<i>millions of dollars</i>	
Advances from the Province of Manitoba		
represented by debenture debt of the Province	7 114	6 640
Manitoba HydroBonds	212	386
Manitoba Hydro-Electric Board Bonds	244	201
	7 570	7 227
Less: Current portion of long-term debt	353	405
	7 217	6 822

Included in the current portion of long-term debt are \$284 million (2007 - \$333 million) of debt maturities and \$69 million (2007 - \$72 million) of floating-rate Manitoba HydroBonds with a maturity date in 2011 and 2012. Floating rate Manitoba HydroBonds are redeemable at the option of the holder.

Long-term debt is guaranteed by the Province of Manitoba, with the exception of Manitoba Hydro-Electric Board Bonds issued for mitigation projects in the amount of \$104 million (2007 - \$57 million).

Debt principal amounts (excluding transaction costs) and related yields are summarized by fiscal years of maturity in the following table:

Years of Maturity	Canadian	Cdn Yields	U.S.	U.S. Yields	2008	2007
					Total	Total
2009	100	4.3%	253	5.9%	353	284
2010	187	5.5%	254	5.8%	441	472
2011	90	4.9%	206	4.5%	296	4
2012	16	4.7%	-	-	16	15
2013	78	5.4%	-	-	78	62
	472	5.1%	713	5.1%	1 185	837
2014-2018	1 472	6.2%	348	7.1%	1 820	1 922
2019-2023	569	6.7%	1 644	7.6%	2 213	2 263
2024-2028	300	7.7%	-	-	300	610
2029-2033	949	9.1%	-	-	949	608
2034-2038	1 025	4.9%	-	-	1 025	475
2039-2057	107	4.9%	-	-	107	107
	4 894	6.5%	2 705	7.4%	7 599	6 822

U.S. debt is translated into Canadian currency at the exchange rate prevailing at the balance sheet date, \$1.00 U.S. = \$1.03 Canadian (2007 - \$1.00 U.S. = \$1.15 Canadian).

## NOTE 11 ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

		2008	2007
		millions of dollars	
Accounts payable		336	296
Regulated liabilities:			
Purchased gas variance accounts		1	9
		337	305

The Corporation passes all costs related to the purchase and transportation of natural gas onto its customers without markup. If the Corporation were not subject to rate regulation, the purchased gas variance accounts would not be maintained and the actual cost of gas would be expensed in the period incurred. If actual gas costs were expensed and sales rates were not adjusted accordingly, net income would have decreased by \$8 million (2007 - decreased by \$32 million).

**NOTE 12 NOTES PAYABLE**

	2008	2007
	<i>millions of dollars</i>	
Canadian notes	-	148
	-	148

The Corporation has bank credit facilities that provide for overdrafts and notes payable up to an amount of \$500 million. At March 31, 2008, there were no overdrafts or notes payable (2007 - \$148 million).

**NOTE 13 DEFERRED LIABILITIES AND CREDITS**

	2008	2007
	<i>millions of dollars</i>	
Employee future benefits, excluding pensions	136	126
Mitigation liability (Note 17)	127	132
Refundable advances from customers	38	35
Affordable Energy Fund (Note 18)	34	34
Asset retirement obligations	24	30
Non-controlling interest (Note 19)	24	15
Interest income and other credits	4	3
Debt premiums (discounts)	1	(16)
Deferred foreign exchange	-	149
	388	508

Asset retirement obligations have been recognized for the future decommissioning of the Corporation's two thermal generating stations, and for the removal and disposal of polychlorinated biphenyl contaminated fluid in HVDC converter station capacitors. The Corporation estimates that the undiscounted cash flows required to settle the asset retirement obligations are approximately \$57 million, \$8 million of which will be incurred between March 31, 2008 and March 31, 2011 for polychlorinated biphenyl contaminated oil removal and disposal. The balance of \$49 million is expected to be incurred in 2024 as part of the decommissioning of Manitoba Hydro's two thermal generating stations. No funds are being set aside to settle the asset retirement obligations.

**NOTE 14 ASSET PURCHASE OBLIGATION**

Effective September 3, 2002, the Corporation acquired the net assets of Winnipeg Hydro from the City of Winnipeg. The Asset Purchase Obligation represents the net present value of payments to the City of Winnipeg of \$20 million per annum in fiscal years 2008 to 2010, and \$16 million per annum in fiscal year 2011 and each year thereafter in perpetuity.

## **NOTE 15 RISK MANAGEMENT AND FINANCIAL INSTRUMENTS**

Manitoba Hydro's operations expose the Corporation to foreign exchange, commodity price, interest rate, and credit risk. Manitoba Hydro's Risk Management Policy is to manage business and operational risks through a systematic, proactive and integrated process which is designed to balance the objectives of identifying threats that affect the achievement of the Corporation's mission and mandate, mitigating the consequences of negative occurrences, and taking advantage of opportunities to provide benefits to all stakeholders. All major risks are closely monitored and effectively managed by the Corporation through a systematic and coordinated process. Risk management activities include risk identification and assessment, risk monitoring, the establishment of risk tolerances, and risk mitigation. The risks of each of the Corporation's subsidiaries are also monitored and managed within the corporate risk management framework. All identified risks are assessed for potential impact using financial, safety, reliability, environment, or customer value criteria. Risk management policies, strategies and limits are designed to ensure Manitoba Hydro's risks and exposures are in line with the Corporation's business objectives and risk tolerances. The Audit Committee of the Board approves the Integrated Risk Management plan developed and maintained by the Corporation.

### **Foreign Exchange Risk**

Manitoba Hydro has exposure to U.S. dollar foreign exchange rate fluctuations primarily through the sale and purchase of electricity and fuel in the U.S. This exposure is managed through a long-term natural hedge between U.S. dollar cash inflows from export revenues and U.S. dollar cash outflows for long-term debt coupon and principal payments and thermal fuel purchases. As a means to bridge temporary timing differences between inflows and outflows to future years' U.S. dollar requirements, the Corporation utilizes derivative foreign exchange forward contracts.

As at March 31, 2008, Manitoba Hydro has outstanding foreign exchange contract purchases of \$107 million U.S. (2007 - \$90 million U.S.) at a weighted average exchange rate of \$0.98 (2007 - \$1.10) and £0.2 million U.K. (2007 - £1 million U.K.) at a weighted average exchange rate of \$2.29 (2007 - \$2.28) and foreign exchange contract sales of nil (2007 - \$6 million U.S. at a weighted average exchange rate of \$1.15). As of March 31, 2008 outstanding forward exchange contracts had a weighted average term of 73 days (2007 - 64 days). The contracts are recorded at their fair value with changes in fair value recognized in net income of the current period. Fair value gains recorded for these contracts in the current year were \$1 million. The fair value of these contracts as at March 31 is as follows:

	2008	2007
	<i>millions of dollars</i>	<i>millions of dollars</i>
Foreign exchange forward contracts	5	4

Foreign exchange forward contracts are valued at year-end market prices as provided by the financial institutions with which these contracts are held.

In addition to natural hedging relationships and forward U.S. exchange contracts, cross currency swap arrangements transacted by the Province of Manitoba (the Province) on the Corporation's behalf are utilized to manage exchange rate exposures and as a means to capitalize on favorable financing terms in either U.S. or Canadian capital markets. Cross currency agreements represent an exchange of principal and/or interest flows denominated in one currency for principal and/or interest flows denominated in another. Such transactions effectively amend the terms of the original debt obligation with the Province with the swapped debt arrangement.

### **Commodity Price Risk**

The Corporation mitigates natural gas price volatility to customers through the use of derivative products restricted to price swaps, call options and cashless collars. The Corporation hedges up to 100% of its primary gas baseload volumes for up to twelve (12) months into the future. A stringent control environment is maintained to manage any risks related to the application of derivatives. These contracts are settled in the month the natural gas is delivered.

Centra has entered into cashless collar contracts until January 2009 to purchase 24 500 000 gigajoules (gj) of natural gas at a weighted average upper strike price of \$8.37/gj. The weighted average forward price per the Alberta Energy Company Exchange (AECO) at March 31, 2008 was \$9.19/gj. Unrealized fair value gains (losses) for these contracts as at March 31 are as follows:

	2008	2007
	<i>millions of dollars</i>	
Cashless collar contracts gains (losses)	22	(1)

Fair value is obtained by using the monthly forward AECO price as reported by the Natural Gas Exchange (NGX) at March 31, 2008.

### **Interest Rate Risk**

Manitoba Hydro is exposed to interest rate risk associated with notes payable net of temporary investments, the current portion of long-term debt net of the current portion of sinking fund investments, and floating rate long-term debt which totaled \$1 356 million at March 31, 2008 (2007 - \$1 558 million). For information purposes, an increase of 1% in the interest rate would reduce net income by \$14 million for the year ended March 31, 2008 (2007 - \$15 million).

Interest rate swap agreements transacted by the Province on the Corporation's behalf are utilized to manage the fixed and floating interest rate mix of the total debt portfolio, interest rate exposure, and related overall cost of borrowing. Interest rate swap agreements represent an agreement between two parties to periodically exchange payments of interest without the exchange of the principal amount upon which the payments are based. The Province may also enter into forward start interest rate swap arrangements where the agreement to exchange interest payments commences at some future date. In either swap arrangement, the terms of the debt advanced by the Province to the Corporation are amended by the swap.

### **Credit Risk**

Credit risk on sinking fund investments, pension assets, and short-term investments is minimized as the Corporation invests exclusively in government-guaranteed bonds, highly rated investments or well diversified investment portfolios. The majority of the Corporation's accounts receivable are owing from domestic consumers who are in diversified industries and from sales to other utilities. Credit risk in the export market is minimized through the application of established credit requirements.

Credit risk associated with counterparties is minimized by establishing minimum credit rating requirements, setting potential exposure limits and monitoring exposure against these limits, and when necessary, obtaining financial assurances from counterparties.

## Fair Value

The estimated fair values of the Corporation's long-term debt and sinking fund investments are based on market yields at close of business on the balance sheet date for similar instruments available in capital markets. The carrying values of all other financial assets and liabilities approximate fair value.

The carrying amounts and fair values of the Corporation's financial instruments at March 31 are as follows:

Financial instrument	2008		2007	
	Carrying amount	Fair value	Carrying amount	Fair value
<i>millions of dollars</i>				
<b>Financial assets</b>				
Cash and cash equivalents	133	133	1	1
Accounts receivable and accrued revenue	465	465	426	426
Interest receivable	10	10	10	10
Sinking fund investments	700	700	630	659
<b>Financial liabilities</b>				
Long-term debt (including current portion)	7 570	9 189	7 227	8 807
Accounts payable and accrued liabilities	337	337	305	305
Notes payable	-	-	148	148
Accrued interest	106	106	138	138
Asset purchase obligation	225	291	228	300

## NOTE 16 COMMITMENTS AND CONTINGENCIES

Manitoba Hydro has energy purchase commitments of \$985 million (2007 - \$1 301 million) that relate to future purchases of natural gas (including transportation and storage contracts) and coal. Commitments are primarily for natural gas purchases, the majority of which expire in 2010. In addition, other outstanding commitments, principally for construction, are approximately \$204 million (2007 - \$213 million).

The Corporation will incur future costs associated with the assessment and remediation of contaminated lands and facilities, and for the phase-out and destruction of polychlorinated biphenyl contaminated mineral oil from electrical equipment. Although these costs cannot be reasonably determined at this time (except for items already recognized as Asset Retirement Obligations), a contingent liability exists.

Due to the size, complexity, and nature of Manitoba Hydro's operations, various legal and operational matters are pending. It is not possible at this time to predict with any certainty the outcome of these matters. Management believes that any settlements related to these matters will not have a material effect on Manitoba Hydro's consolidated financial position or results of operations.

## **NOTE 17 MITIGATION**

The Corporation is party to an agreement dated December 16, 1977, with Canada, the Province of Manitoba and the Northern Flood Committee Inc., representing the five First Nations in the communities of Cross Lake, Nelson House, Norway House, Split Lake and York Landing. This agreement, in part, provides for compensation and remedial measures necessary to ameliorate the impacts of the Churchill River Diversion and Lake Winnipeg Regulation projects. Comprehensive settlements have been reached with all communities except Cross Lake.

Expenditures incurred or settlements reached to mitigate the impacts of all projects amounted to \$37 million (2007 - \$17 million) during the year. In recognition of future anticipated mitigation payments, the Corporation has recorded a liability of \$127 million (2007 - \$132 million).

The Corporation has also entered into agreements with the Province of Manitoba whereby the Corporation has assumed obligations of the Province with respect to certain northern development projects. The Corporation has assumed obligations totaling \$143 million for which water power rental charges were fixed until March 31, 2001. The obligations outstanding at March 31, 2008 amounted to \$11 million (2007 - \$13 million).

To March 31, 2008, \$653 million (2007 - \$616 million) has been recorded to mitigate and compensate for all project-related impacts. There are other mitigation issues, the outcomes of which are not determinable at this time. In total, such other mitigation issues are not considered to be significant.

## **NOTE 18 AFFORDABLE ENERGY FUND**

In accordance with the provisions of the Winter Heating Cost Control Act (the Act), Manitoba Hydro established an Affordable Energy Fund (the Fund) in the initial amount of \$35 million for the purpose of providing support for programs and services that:

- (a) encourage energy efficiency and conservation;
- (b) encourage the use of alternative energy sources, including earth energy; and
- (c) facilitate research and development of alternative energy services and innovative energy technologies.

For accounting purposes, the Fund was established as a Deferred Charge (Note 9) with an offsetting Deferred Credit (Note 13). Expenditures of \$1 million (2007 - \$1 million) during the year were charged to operations with the deferred accounts reduced accordingly.

## **NOTE 19 ADVANCES TO TASKINIGAHP POWER CORPORATION**

Taskinigahp Power Corporation (TPC) has a non-controlling interest in the Wuskwatim Generating Station which is currently under construction and projected to be placed in-service in 2012.

TPC is owned beneficially by Nisichawayasihk Cree Nation (NCN). Both Manitoba Hydro and NCN are parties to the Wuskwatim Power Limited Partnership (WPLP) which was formed to carry on the business of developing, owning and operating the generating station.

In accordance with the partnership agreements, Manitoba Hydro provides debt financing to TPC. At March 31, 2008 Manitoba Hydro has provided advances to TPC of \$23 million (2007 - \$14 million). The advances are repayable by TPC, with interest, subsequent to the in-service date of the Wuskwatim Generating Station. TPC's non-controlling interest is \$24 million (2007 - \$15 million).

## NOTE 20 SEGMENTED INFORMATION

The Corporation operates primarily in two business segments: electricity and natural gas. Each segment has its own particular economic characteristics and differs in nature, production processes, and technology. The electricity segment encompasses the generation, transmission, and distribution of electricity. The gas segment represents natural gas supply and distribution activities through the operations of Centra Gas. The Corporate segment represents the costs to acquire Centra Gas and to integrate its operations into those of Manitoba Hydro. These costs are allocated to gas and electricity segments in accordance with the synergies and benefits derived by each of these segments as a result of the acquisition.

The following table contains information related to the operating results, assets, liabilities, and retained earnings by segment:

	Electricity		Gas		Corporate		Total	
	2008	2007	2008	2007	2008	2007	2008	2007
<i>millions of dollars</i>								
<b>Revenues (net of cost of gas sold)</b>	1 722	1 632	142	129	-	-	1 864	1 761
<b>Expenses</b>								
Operating and administrative	335	332	56	54	-	-	391	386
Finance expense	401	467	22	22	17	17	440	506
Depreciation and amortization	324	312	23	18	2	2	349	332
Water rentals and assessments	124	112	-	-	-	-	124	112
Fuel and power purchased	134	226	-	-	-	-	134	226
Capital and other taxes	57	55	23	22	-	-	80	77
Corporate allocation	7	7	12	12	(19)	(19)	-	-
	1 382	1 511	136	128	-	-	1 518	1 639
<b>Net income</b>	340	121	6	1	-	-	346	122
Total assets	11 165	10 325	602	597	-	-	11 767	10 922
Total liabilities	9 065	8 939	575	576	-	-	9 640	9 515
Total retained earnings	1 795	1 386	27	21	-	-	1 822	1 407

## NOTE 21 COMPARATIVE FIGURES

Where appropriate, comparative figures for 2007 have been reclassified in order to conform to the presentation adopted in 2008.

# FINANCIAL STATISTICS

For the year ended March 31	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
	millions of dollars									
<b>Revenues</b>										
<b>Electrical:</b>										
Residential	436	410	387	386	368	354	314	320	300	300
General Service	638	614	597	553	550	521	472	461	437	448
Extraprovincial	625	592	827	554	351	463	588	480	376	326
Other Revenue	23	16	17	15	18	16	11	8	9	6
<b>Gas:</b>										
Residential	255	245	238	244	235	247	225	240	137	-
Commercial / Industrial	267	257	274	258	252	261	248	259	130	-
Transportation	4	4	3	5	4	4	4	2	1	-
Other Revenue	2	2	2	2	3	3	2	3	1	-
	2 250	2 140	2 345	2 017	1 781	1 869	1 864	1 773	1 391	1 080
<b>Expenses</b>										
Operating and Administrative	391	386	375	363	346	326	298	285	269	223
Finance Expense	440	506	503	502	487	479	482	420	419	411
Depreciation and Amortization	349	332	322	311	296	281	260	249	227	198
Water Rentals	124	112	131	111	71	103	113	56	51	50
Fuel and Power Purchased	134	226	125	135	569	151	71	48	33	59
Capital and Other Taxes	80	77	77	75	73	66	61	61	58	39
Cost of Gas Sold	386	379	397	384	375	392	365	384	182	-
	1 904	2 018	1 930	1 881	2 217	1 798	1 650	1 503	1 239	980
<b>Net Income</b>	346	122	415	136	(436)	71	214	270	152	100
<b>110</b>										
<b>111</b>										
<b>Assets</b>										
Property, Plant and Equipment	11 861	11 424	11 065	10 748	10 399	9 991	9 072	8 762	8 454	7 815
Less Accumulated Depreciation	4 187	3 924	3 657	3 447	3 241	3 042	2 834	2 609	2 407	2 217
Construction in Progress	1 238	878	602	475	378	356	388	275	188	176
Sinking Fund Investments	700	630	555	562	715	948	1 515	1 350	1 282	1 111
Current and Other Assets	2 155	1 914	1 917	1 614	1 652	1 981	2 264	2 188	1 175	981
	11 767	10 922	10 482	9 952	9 903	10 234	10 405	9 966	8 692	7 866
<b>Liabilities and Retained Earnings</b>										
Long-Term Debt	7 217	6 822	7 051	7 048	7 114	6 925	7 123	6 968	6 611	5 883
Current and Other	2 123	2 395	1 849	1 738	1 781	1 875	1 699	1 629	988	1 050
Contributions in Aid of Construction	300	298	297	296	274	264	281	281	275	267
Retained Earnings	1 822	1 407	1 285	870	734	1 170	1 302	1 088	818	666
Accumulated Other Comprehensive Income	305	-	-	-	-	-	-	-	-	-
	11 767	10 922	10 482	9 952	9 903	10 234	10 405	9 966	8 692	7 866
<b>Cash Flows</b>										
Operating Activities	630	443	710	433	(127)	432	554	334	374	366
Financing Activities	487	227	77	236	753	213	100	170	440	64
Investing Activities	985	788	677	666	650	629	638	521	856	507
<b>Financial Indicators</b>										
Interest Coverage <sup>1</sup>	1.71	1.23	1.77	1.25	0.17	1.14	1.42	1.62	1.35	1.23
Debt Ratio <sup>2</sup>	0.77	0.80	0.81	0.85	0.87	0.80	0.77	0.80	0.83	0.84
Capital Coverage <sup>3</sup>	1.60	1.10	2.28	1.20	(0.32)	1.10	1.67	1.18	1.28	1.22

<sup>1</sup> Interest Coverage represents net income plus interest on debt divided by interest on debt.

<sup>2</sup> Debt Ratio represents debt (long-term debt plus notes payable minus temporary investments) divided by debt plus retained earnings plus contributions in aid of construction.

<sup>3</sup> Capital Coverage represents internally generated funds divided by capital construction expenditures.

# OPERATING STATISTICS

For the year ended March 31	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
<b>Manitoba</b>										
<b>System Capability</b>										
Capability (000 kW)	5 465	5 461	5 469	5 470	5 471	5 464	5 230	5 210	5 116	5 137
Manitoba Firm Peak Demand (000 kW)	4 273	4 184	4 054	4 169	3 959	3 916	3 760	3 637	3 524	3 559
Percent Change	2.1	3.2	(2.8)	5.3	1.1	4.1	3.4	3.2	(1.0)	2.0
<b>System Supply</b>										
Total Energy Supplied (000 000 kWh)										
Generation	35 354	32 132	37 620	31 548	19 338	29 167	32 633	32 687	30 146	30 043
Isolated Systems	12	12	12	11	11	11	10	10	9	17
	35 366	32 144	37 632	31 559	19 349	29 178	32 643	32 697	30 155	30 060
<b>Load at Generation (000 000 kWh)</b>										
Integrated System	23 985	23 327	22 622	22 452	21 907	21 965	20 519	20 123	19 101	19 398
Isolated System	12	12	12	11	11	11	10	10	9	17
	23 997	23 339	22 634	22 463	21 918	21 976	20 529	20 133	19 110	19 415
Percent Change	2.8	3.1	0.8	2.5	(0.3)	7.0	2.0	5.4	(1.6)	1.5
<b>System Demand</b>										
Energy Delivered (000 000 kWh)										
Residential	6 838	6 539	6 266	6 370	6 266	6 135	5 206	5 282	4 928	4 947
General Service	14 271	14 016	13 710	13 411	13 057	12 818	11 752	11 416	10 892	11 384
Manitoba	21 109	20 555	19 976	19 781	19 323	18 953	16 958	16 698	15 820	16 331
<b>Net Metered Interchange</b>	<b>10,590</b>	<b>8,217</b>	<b>13,706</b>	<b>8,213</b>	<b>(2,578)</b>	<b>6,378</b>	<b>10,911</b>	<b>11,247</b>	<b>9,906</b>	<b>9,469</b>
(+Exports - Imports)										
<b>Gas Deliveries (millions of cubic metres)</b>										
Residential	647	620	579	681	653	714	645	699	626	-
Commercial / Industrial	891	844	803	917	893	980	899	974	887	-
Transportation	618	592	598	559	577	640	502	501	530	-
	2,156	2,056	1,980	2,157	2,123	2,334	2,046	2,174	2,043	-
<b>Number of Customers</b>										
Electric:										
Residential	455 430	450 823	446 370	442 840	438 953	435 507	355 473	353 297	352 618	349 710
General Service	66 169	66 038	63 421	62 826	62 697	62 218	50 062	49 743	49 405	49 153
	521 599	516 861	509 791	505 666	501 650	497 725	405 535	403 040	402 023	398 863
Gas:										
Residential	236 498	235 016	233 190	231 366	229 194	227 071	225 258	224 020	222 110	-
Commercial / Industrial	24 661	24 553	24 627	24 559	24 437	24 202	24 093	24 054	23 651	-
	261 159	259 569	257 817	255 925	253 631	251 273	249 351	248 074	245 761	-
<b>Number of Employees</b>										
Regular	4 709	4 406	4 409	4 386	4 389	4 399	3 862	3 904	3 806	3 277
Construction	1 107	1 161	1 154	1 098	1 006	966	899	797	866	836
	5 816	5 567	5 563	5 484	5 395	5 365	4 761	4 701	4 672	4 113

# Our facilities



## LEGEND

- Hydro Generating
- Thermal Generating
- Diesel Generating
- Converter Stations
- Control Structures
- ~~~~ Diversion Channels
- ▲ Points of Interchange
- HVDC Transmission
- 500-kV transmission
- 230-kV transmission
- 138-kV transmission
- 115-kV transmission
- 66-kV transmission
- TransCanada Pipeline
- Gas Distribution



## SOURCE OF ELECTRICAL ENERGY GENERATED AND IMPORTED

For the year ended March 31, 2008

<b>Nelson River</b>	<b>78.68%</b>	<b>Saskatchewan River</b>	<b>6.34%</b>
<b>Billion kWh generated</b>	<b>28.3</b>	<b>Billion kWh generated</b>	<b>2.3</b>
Limestone	25.96%	Grand Rapids	6.34%
Kettle	24.48%		
Long Spruce	20.72%	<b>Laurie River</b>	<b>0.20%</b>
Kelsey	4.57%	<b>Billion kWh generated</b>	<b>0.1</b>
Jenpeg	2.95%	Laurie River #1	0.09%
		Laurie River #2	0.11%
 <b>Winnipeg River</b>	 <b>11.75%</b>	 <b>Thermal</b>	 <b>1.27%</b>
<b>Billion kWh generated</b>	<b>4.2</b>	<b>Billion kWh generated</b>	<b>0.5</b>
Seven Sisters	3.26%	Brandon	1.27%
Great Falls	2.59%	Selkirk	0.00%
Pine Falls	1.86%		
Pointe du Bois	1.48%	<b>Imports</b>	<b>0.77%</b>
Slave Falls	1.36%	<b>Billion kWh imported</b>	<b>0.3</b>
McArthur	1.20%	 <b>Wind</b>	 <b>0.99%</b>
		<b>Billion kWh imported</b>	<b>0.4</b>

## GENERATING STATIONS AND CAPABILITIES

For the year ended March 31, 2008

### Interconnected Capabilities

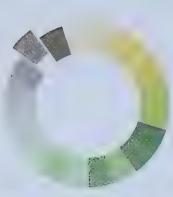
Station	Location	Number of Units	Net Capability (MW)
<i>Hydraulic</i>			
Great Falls	Winnipeg River	6	132
Seven Sisters	Winnipeg River	6	165
Pine Falls	Winnipeg River	6	89
McArthur	Winnipeg River	8	55
Pointe du Bois	Winnipeg River	16	74
Slave Falls	Winnipeg River	8	67
Grand Rapids	Saskatchewan River	4	479
Kelsey	Nelson River	7	234
Kettle	Nelson River	12	1 220
Jenpeg	Nelson River	6	128
Long Spruce	Nelson River	10	1 010
Limestone	Nelson River	10	1 340
Laurie River (2)	Laurie River	3	10
<i>Thermal</i>			
Brandon		3	336
Selkirk		2	126

### Isolated Capabilities

<i>Diesel</i>	
Brochet	3
Lac Brochet	2
Shamattawa	3
Tadoule Lake	2

### Total Generating Capabilities

5 475



## *Our board*



Garry Leach, Phillip Jessup, Leslie Turnbull, Ken Paupanekis, Victor Schroeder, Ken Hildahl, Gerard Jennissen, Phil Dorion, Michael Spence, David Friesen, William Fraser

T14  
T15

**VICTOR H. SCHROEDER, QC**

Associate

Levene Tadman Gutkin Golub LLP

Barristers and Solicitors

Winnipeg, Manitoba

**PHIL DORION**

President and CEO

Aseneskak

Opaskwayak, Manitoba

**DAVID FRIESEN**

Chair and CEO

Friesens Corporation

Altona, Manitoba

**KEN HILDABL**

Vice President

Sales and Marketing

Manitoba Blue Cross

Winnipeg, Manitoba

**GERARD JENNISSEN**

Member of the Legislative Assembly for Flin Flon

Province of Manitoba

**PHILLIP JESSUP**

Executive Director

The Toronto Atmospheric Fund

Toronto, Ontario

**KEN PAUPANEKIS**

Norway House, Manitoba

**GARRY LEACH**

Chair and CEO

Belcher Island Smelting and Refining Corporation

Winnipeg, Manitoba

**MICHAEL SPENCE**

Mayor of Churchill and

Member of York Factory First Nation

**LESLIE TURNBULL**

Partner

Viewpoints Research Ltd.

Winnipeg, Manitoba

**WILLIAM C. FRASER, FCA**

Former CEO, Manitoba Telecom Services

*Our senior officers*



Ken Adams, Vince Warden, Gerry Rose, Robert Brennan, Ruth Kristjanson, Ken Tennenhouse, Al Snyder

**ROBERT B. BRENNAN, FCA**  
President and Chief Executive Officer

**KEN R.F. ADAMS, P. Eng**  
Vice-President  
Power Supply

**E. RUTH KRISTJANSON, BA (Hons), MA**  
Vice-President  
Corporate Relations

**GERRY W. ROSE, B.Comm (Hons), MBA**  
Vice-President  
Customer Service & Marketing

**AL M. SNYDER, P.Eng, MBA**  
Vice-President  
Transmission & Distribution

**KEN M. TENNENHOUSE, LL.B**  
General Counsel and  
Corporate Secretary

**VINCE A. WARDEN, CMA, FCMA**  
Vice-President  
Finance & Administration and  
Chief Financial Officer

# GLOSSARY

## UTILITY TERMS

**Demand:** The size of any load, expressed in kilowatts (kW), averaged over a specified period of time.

**Distribution system:** The wood poles, conductors, and transformers that deliver electricity to customers. The distribution system transforms high voltages to lower, more usable levels. Electricity is distributed at 120/240 volts (V) for most residential customers and 120 to 600 V for the majority of industrial and commercial customers.

**Energy:** The ability to do work. Electrical utilities sell electrical energy to their customers who, in turn, convert this energy into a desirable form—such as work, heat, light, or sound. Electrical energy is measured in kilowatt-hours.

**Generator:** A machine that converts mechanical energy—such as a rotating turbine driven by water, steam, or wind—into electrical energy.

**Natural gas:** A fossil fuel made from hydrocarbons stored millions of years ago when plants and other materials were buried in the earth's crust. Composed mostly of methane—a colourless and non-toxic substance—natural gas creates virtually no unburned particles or smoke to pollute the atmosphere. The products of combustion are chiefly carbon dioxide and water—the same products exhaled by the human body.

**NCN:** The Nisichawayasihk Cree Nation from northern Manitoba, one of the five native communities identified in the Northern Flood Agreement.

**PDA:** Project Development Agreement between the Nisichawayasihk Cree Nation and Manitoba Hydro for the Wuskwatim Generating Station.

**PUB:** The Public Utilities Board. The provincial government's regulatory body through which all of Manitoba Hydro's electricity and natural gas rate applications must be approved before rate increases or decreases can become effective.

**Peak load:** Record of maximum amount of electricity for the fiscal year measured at a specific moment in time.

**Power grid:** A number of interconnecting electrical power systems linking together electrical utilities and covering a large geographical area.

**Transmission system:** The towers and conductors that transport electricity in bulk form from a source of supply to local areas for distribution or to the power systems of out-of-province electrical utilities. Electricity is usually transported via transmission lines in amounts ranging from 66 kV to 500 kV.

## ACCOUNTING TERMS

**Blended Forward Interest Rate Swap:** An agreement between two parties to exchange predetermined fixed and floating interest rates on a specified notional amount of a principal debt or investment for a specified term. The fixed interest rate is a bond yield calculation based on the fixed interest rate of the existing debt or investment and the fixed interest rate of the forward interest rate swap.

**Exposure Management Program:** U.S. dollar hedging program used by the Corporation to offset U.S. dollar cash flows from debt, investments, and net exports to eliminate the impact of fluctuations in the U.S. dollar exchange rate.

**Financial instrument:** Bonds, provincial advances, short-term promissory notes, temporary and long-term investments, and swap option and foreign exchange contracts.

**Foreign exchange contract:** An agreement to exchange a predetermined amount of currency on a specified future date at a specified price.

**Retained earnings:** Net accumulated earnings that a business has not distributed to shareholders.

**Sinking fund:** A fund of cash and securities set up to provide for the orderly retirement of a debt.

**Swap:** An agreement between two parties to exchange cash flows at predetermined rates on specified notional amounts at specified future dates.

**Yield:** The average return of a debt or investment using a bond yield convention which recognizes the future interest payments, capital gains or losses, commissions, discounts, and premiums.

**Weighted Average Yield Rate:** The average return of debt or investment using the bond yield convention, weighted by the remaining term to maturity.

## UNITS OF MEASURE

**BTU:** British Thermal Unit. The amount of energy required to raise the temperature of one pound of water one degree Fahrenheit, equaling roughly 1 000 joules.

**Gigajoule:** A measure of energy for natural gas equaling one billion joules. One gigajoule of energy is equivalent to that provided by approximately 278 kWh of electricity or 30 litres of gasoline.

**Gigawatt (GW):** The unit of electrical power equivalent to one billion watts or one million kW.

**Kilovolt (kV):** The unit of electrical pressure, or force, equivalent to 1 000 volts (V).

**Kilowatt-hour (kWh):** The basic unit of electrical energy by which electricity is measured. For example, 10-100 W light bulbs switched on for one hour equals one kilowatt-hour (1 000 W for one hour).

**Megawatt (MW):** The unit of electrical power equivalent to one million watts, or 1 000 kilowatts (kW).

## PHOTO CREDITS

Page 2, 23	Brad Korponay
Page 6	Daryl Godkin Photography
Page 33	Asessippi Ski Resort
Page 58	Scott Stevens
Page 59	Gordon Ross

Corporate Head Office  
820 Taylor Avenue  
Winnipeg, Manitoba, Canada

Mailing Address:  
PO Box 815  
Station Main  
Winnipeg, Manitoba  
R3C 2P4

Internet Sites (corporate and subsidiaries)  
Manitoba Hydro: [www.hydro.mb.ca](http://www.hydro.mb.ca)  
Manitoba Hydro International: [www.mhi.mb.ca](http://www.mhi.mb.ca)  
Manitoba HVDC Research Centre: [www.hvdc.ca](http://www.hvdc.ca)

Telephone: 204-474-3311  
E-mail: [publicaffairs@hydro.mb.ca](mailto:publicaffairs@hydro.mb.ca)

